2009OC135-07

Pétrolia, Tar Point No 1 (2009FC135) - Rapport de fin de forage

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Énergie et Ressources naturelles
Québec

PÉTROLIA

Leader en exploration pétrolière au Québec

Pétrolia - Tar Point N°1
(2009FC135)
Rapport de Fin de Forage

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Table des matières

RÉSUMÉ DES DONNÉES DU PUITS 3
INTRODUCTION : 4
1/ RÉSUMÉ DES TRAVAUX DE FORAGE 9
1.1/ Résumé des opérations de forage : 9
1.2/ Résumé Géologique : 11
1.3/ État du puits : 13
1.4/ Toit des formations géologiques 14
1.5/ Résumé des mesures de déviation 14
2/ CONSTRUCTION : 18
2.1/ La boue utilisée 18
2.2/ Liste des trépans utilisés 19
2.3/ Coffrage et ciment 20
3/ EVALUATION 26
3.1/ Description des carottes latérales 26
3.2/ Diagraphies Enregistrées 30
3.3/ Résultats des essais aux tiges 31
ANNEXES 33
ANNEXE 1
DESCRIPTION DES DEBLAIS DE FORAGE
ANNEXE 2
RAPPORTS JOURNALIERS DE FORAGE
ANNEXE 3
RAPPORTS JOURNALIERS DE LA BOUE
ANNEXE 4
RAPPORTS JOURNALIERS GEOLOGIQUE
ANNEXE 5
RAPPORTS DES TESTS
ANNEXE 6
PERMIS
PLAN D'ARPENTAGE
ANNEXE 7
STRIPLOG

RÉSUMÉ DES DONNÉES DU PUITS

Nom du puits:	Pétrolia Tar Point N°1
Permis de forage :	2009C135
Permis de recherche:	2005RS123
Type:	Exploration
Opérateur:	Pétrolia Inc.
Élévations:	Sol - NM: 33.34m
	KB – Sol : 5.02m
	KB – NM : 38.36m
Coordonnées de Surface:	
Géographiques :	48° 43' 28.25" N, 64° 18' 28.51" W
UTM (NAD 83 Zone 20):	539765 m N & 403810 m E
Coordonnées de fond:	
UTM (NAD 83 Zone 20):	539842 m N & 403811 m E
Région:	(C) Gaspésie Québec
Contracteur de forage:	Savanna Energy Rig # 635
Début forage:	23/10/2009 à 12h15
Diamètre du trou:	Surface : 311 mm jusqu'à 212 mKB
	Intermédiaire: 216 mm jusqu'à 2200 mKB
	Final : 152.4 mm jusqu'à 2434 mKB
Coffrage:	Surface: 244.5 mm jusqu'à 212 mKB
	Production : 178 mm jusqu'à 2199 mKB
Carottage:	pas de carottage
Profondeur Totale :	2434 mKB/MD 2178.8 mKB/TVD -2140.5 mSS
Fin de forage:	02/12/2009 à 07h00
Fin des opérations:	07/12/2009 à 16h00
Statut du puits:	Puits suspendu pour évaluation/complétion.

INTRODUCTION :

Le forage Pétrolia Tar Point N°1 se situe sur le permis 2005RS123 dans le projet Couloir Haldimand Sud dans la partie est de la péninsule de Gaspé. Le puits est à 24 km au sud-est de la ville de Gaspé plus exactement dans la localité de l'Anse à Brillant. Il a évalué les qualités réservoirs et le contenu en fluide des grès de la Formation de York River, les calcaires de la formation Indian Cove sur la structure anticlinale faillée de Tar Point.

A partir de 400m, le puits Pétrolia Tar Point N°1 a été dévié vers le nord ouest (environ 295-320°) avec des équipements directionnels. La déviation du forage a atteint 20.3 ° à 625 m, celle-ci a été maintenue entre 19° et 21° entre cette profondeur et 1300 m. À partir de 1328 m le forage a continué sans outils de contrôle directionnel. La trajectoire du trou a tourné vers le nord – nord est à partir de 1600 m. L'inclinaison maximale du trou est 47.9° à 1850 m. A la profondeur totale 2434 mMD (2178.8 mKB/TVD -2140.5 mSS), la déviation du trou est de 33° avec azimut de 32.5° et une section verticale de 772 m.

Le puits Pétrolia Tar Point N°1 a pénétré le toit de la Formation de York River à la cote 129 m KB. Au toit de la Fm de York River, le puits Pétrolia Tar Point N°1 est 480 m plus élevé que pour le même contact à Pétrolia Haldimand N°2. L'épaisseur des grès de cette formation est de 1665 m.
Les calcaires de la formation Indian Cove ont été rencontrés à la côte 1794 mMD. La Formation d'Indian Cove a une épaisseur apparente de 479 m, mais elle est tronquée par une faille à la base à la profondeur 2273.6 mMD.

Le forage a été continué sous la faille dans des séries gréseuses attribuées au Grès de Gaspé (?).
Le puits est présentement coffré jusqu'à la profondeur de 2199 m. Un bouchon rétractable a été installé à la base du coffrage dans le but de pouvoir évaluer, s'il y a lieu, la section non coffrée au fond du puits.

Cinq essais aux tiges ont été effectués, les deux premiers avec des résultats positifs:

L'essai aux tiges n°1 : réalisé entre les cotes 2045 m et 2201 m, l'essai a testé une section de calcaire fortement fracturée de la Formation d'Indian Cove. En une heure, la zone a livré un faible débit de gaz à la surface et 184 litres de fluide (essentiellement constitué de boue de forage et du pétrole léger) qui ont été récupérés dans les tiges. Des échantillons constitués à 100% de pétrole léger ont été prélevés dans la chambre d'échantillonnage pour fin d'analyses.
Selon les résultats obtenus, la zone testée pourrait faire l'objet d'une fracturation hydraulique dans le but d'augmenter la production quotidienne du puits.

L'essai aux tiges n°2 : effectué dans la Formation de York River, entre les cotes 1528 m et 1584 m, l'essai a donné un faible débit d'air à la surface et une récupération dans les tiges de 58,33 mètres (213 litres) de boue de forage légèrement gazéifiée et de la boue gazéifiée coupée avec un peu de pétrole noir dans la chambre d'échantillonnage. Les données de remontées de pression indiquent que la zone testée a une faible perméabilité. Comme cette zone est située dans la même formation qu'Haldimand, la décision de procéder à la stimulation hydraulique dépendra des résultats de travaux qui seront entrepris sur Haldimand au début de 2010.

L'essai aux tiges n°3 : réalisé en trou ouvert entre les cotes 2199 m et 2318 m, l'essai a testé la partie basale de calcaire fortement fracturée de la Formation d'Indian Cove et les grés de Gaspé (?) au delà de la faille (2273.6 m). En 1h30min, la zone a livré un faible débit de gaz à la surface et 78 litres de fluide (essentiellement constitué de boue de forage gazéifiée avec traces d'huile) qui ont été récupérés dans les tiges. La chambre d'échantillonnage était remplie de gaz (pas de boue, huile ou eau).

Les essai aux tiges n°4 et 5: réalisés en trou ouvert entre 2 packers à 2405 m - 2395 m et 2334-2312m, deux intervalles des grés de Gaspé (?). Les zones n'ont rien livré à la surface. La chambre d'échantillonnage du test n°4 était remplie de gaz à faible pression. Celle du test n°5 était remplie de boue. Les analyses de pression de fond ont montré que ces deux intervalles ont une très faible perméabilité même si des problèmes de fermeture de valve pour le test n°4 et des doutes sur l'étanchéité du packer inferieur du test n°5 ont été remarqués.

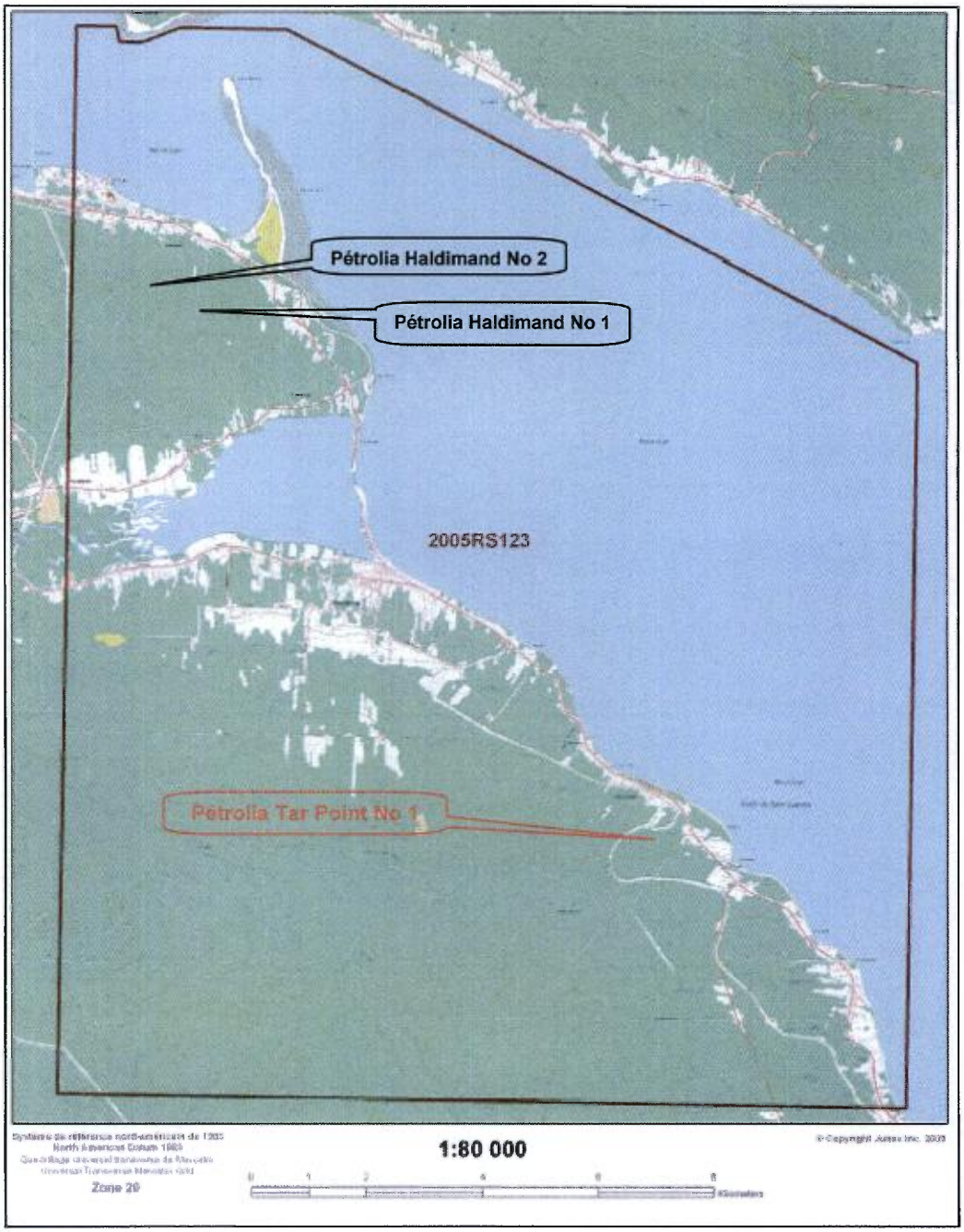


Figure1: Localisation du Permis de Recherche 2005RS123



Figure 2 : Localisation du puits Pétrolia Tar Point N°1

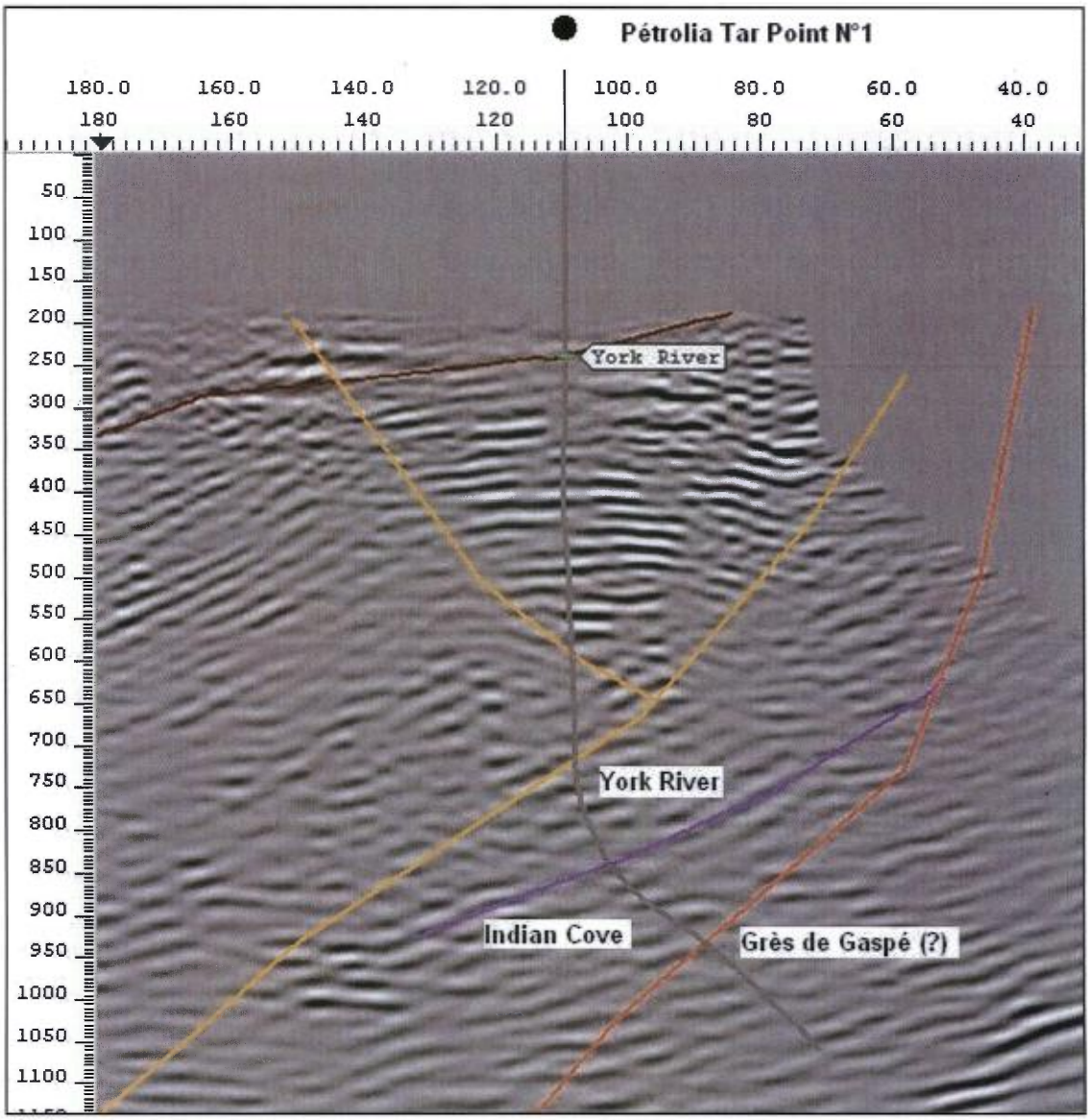


Figure 3: Localisation du Puits sur la sismique Prevel 08-02, SP 110 (Projection)

1/ RÉSUMÉ DES TRAVAUX DE FORAGE

1.1/ Résumé des opérations de forage :

- Début Forage 23 Octobre 2009
- Mise en place du coffrage de surface 25 Octobre 2009
- Mise en place du coffrage de production 24 Novembre 2009
- Prise des diagraphies
  - 1ère étape : 17-18 Novembre 2009
  - 2ème étape : 5-6 Décembre 2009
- Tests
  - DST# 1 : 20 Novembre 2009
  - DST# 2 : 21-22 Novembre 2009
  - DST# 3 : 28-29 Novembre 2009
  - DST# 4 : 3 Décembre 2009
  - DST# 5 : 4 Décembre 2009
- Fin de forage 02 Décembre 2009
- Foreuse libérée 07 Décembre 2009

Le forage Pétrolia Tar Point N°1 a débuté à 12:00h le 23 octobre 2009, dès la première journée, 60 m ont été forés avec un taux de pénétration moyen de 7,00 m/hr et une densité de la boue de 1,05. Deux mesures de déviation ont suivi : 20m, 0,85°; 30m, 0,77°. 213 m atteint le 3 ème jour avec un taux moyen de 4 m/h. Durant la même journée les travaux de mise en place du coffrage de surface ont débuté vers 17 :00h et se sont terminés vers 24 :00h. Une cimentation sans problème et un retour en surface de 1,5 m^3.

Reprise du forage avec une augmentation du taux de pénétration (14.5 m/h). Changement de l'outil à partir de 400m pour un début de déviation et mise en place de l'équipement directionnel.
La déviation du forage a atteint 20,3° à 625 m, avec une densité de la boue maintenue entre 1,05 et 1,08. Plus tard dans la soirée, le forage a été interrompu et le train de tiges a été remonté pour un changement d'outil à 640m. D'autres changements d'outil se sont fait aux profondeurs : 909 m, 1171 m et 1328 m en fonction de la lithologie des sédiments traversés beaucoup plus compacts, ce qui a engendré une usure rapide des outils PDC et une diminution du taux de pénétration au bout de quelques mètres forés avec un nouvel outil. Les ROP sont passés de 13m/h en moyenne à 4-5 m/h taux moyen. En ce qui concerne la déviation, elle a été maintenue entre 19° et 21° à ces profondeurs. Le dernier changement d'outil à 1328 m s'est fait sans contrôle directionnel, le forage a continué sans aucun outil directionnel tout on essayant de contrôler plus au moins la déviation et la maintenir en dessous de 50°.

Autres changements de trépan à : 1443 m et 1711 m.

À 1807 m, le forage a été interrompu pour changement de trépan en plus d'un moteur de fond associé. Les ROP ont augmenté jusqu'à 7 -11m/h, et sont restés plus au moins stables pendant 3 jours pour diminuer à 2.5 m/h par la suite. La déviation a également augmenté pour atteindre 42° à la profondeur de 1964 m.
Un autre changement de trépan « Tricône » à la profondeur 2026 m, suivi d'une circulation et nettoyage au cours de la descente de l'outil. La déviation a diminué à 34° à partir de la profondeur 2177 m. Deux autres changements avec moteur de fond aux profondeurs 2143m, 2200 m et 2282 m. Une circulation et nettoyage du trou ont suivi pour la préparation de l'enregistrement des diagraphies. L'opération s'est déroulée en deux étapes au cours du forage (voir résumé ci-dessus).
Le 17 et 18 Novembre, jours d'enregistrement des diagraphies : Sonic, FMI, GR, CMR, et en dernier prise de 14 carottes latérales dans la Formation du York River (333.3m-1259 m).
Premiers tests effectués sur le puits Pétrolia-Tar Point N°1, au niveau des intervalles 2200 - 2045 m et 1584 -1534 m (DST # 1 et DST # 2).
Un coffrage a été descendu après les opérations de diagraphies et de tests (2200-212 mMD). Cette descente a duré 3 jours (du 22 au 24 Novembre) avec des tests de BOP.

Descente du train de tige et forage du «stage tool» et du sabot de ciment. Circulation de la boue et reprise du forage à 22:45 hr avec une Boue de densité 1,07, un angle de déviation de 35° et un taux de pénétration de 2,40 m/h, la profondeur atteinte à minuit est de 2203 m.

Premiers pics de gaz mineurs à 2243 m, le forage a continué dans les calcaires silteux de l'Indian Cove avec une déviation de 36.5° à 2252 m. Un autre changement de trépan pour un PDC. Durant la même journée, une interruption du forage pour problème d'outil et remontée des trains de tiges pour finalement entamer un test DST # 3 en trou ouvert au niveau de l'intervalle 2199-2318 m.

Reprise du forage après le DST avec un ROP moyen de 2-4 m/h. Des pics de gaz sont survenus à la profondeur de 2329.5 m et 2334 m.
Deux derniers changements d'outil (à 2367 m et 2409 m) ont été effectués pour un arrêt total du forage à la profondeur totale de 2434 m (TD). Pour ce qui est de la déviation elle a atteint 33° à la profondeur de 2403 m.

À la fin du forage l'outil Totco est resté au fond du trou et a été récupéré par la suite. Deux tests DST ont été programmés pour couvrir deux zones : 2405-2395 m (DST N°4) et la zone 2334-2312 m (DST N°5), suivis par la deuxième étape de l'enregistrement des diagraphies (voir détails diagraphies). Les dernières opérations sur le puits à savoir, les circulations, nettoyage du trou et descente du "Retrievable packer" avec tiges de forage et ancrage à 2181 m (top). Remontée finale des tiges de forage. Le packer a été posé à 2182 m suivi de tests de pressions. Démontage BOP et pose d'une plaque obturatrice.

Le forage a duré 46 jours pour se terminer le 07 Décembre 2009 (Rig release).

1.2/ Résumé Géologique :

Battery point: 16 m-129 m

Le forage a débuté comme prévu dans le Membre de Petit Gaspé de la Formation de Battery Point. L'unité est formée à près de 95 % de grès moyen à très grossier. On note aussi des grès conglomératiques et 2 ou 3 % de mudstone gris. La fraction principale du grès est composé à plus de 90 % de quartz poly- et monocristallin, d'environ 2 à 4 % de feldspath généralement potassiques mais rarement roses, de 2 à 4 % de fragments lithiques (métamorphiques, ignés et sédimentaires), de jaspe et de glauconite. Les grains sont subanguleux à subarrondis. Le tri est faible à moyen, La matrice est peu abondante. On observe des ciments de silice et de carbonates (calcite, dolomite et sidérite). Les mudstones sont plus ou moins silteux et parfois dolomitiques présentant par endroits des traces de bitumes noirs ou ambrés.

York River: 129 m-1794 m

Après avoir foré 129 m, on atteint la formation du York River qui finalement est épaisse de 1665 m.
L'unité est formée d'une alternance de niveaux de grès fin à moyen accompagnés de mudstone et de niveaux de siltstones et de mudstone interlités de grès fin et moyen.
Le grès est à grain fin à moyen avec accessoirement du grès grossier et très rarement du grès conglomératique dans la partie supérieure de l'unité. Il est composé à 75-95% de quartz poly- ou monocristallin, de feldspath gris (parfois rose dans la partie supérieure de l'unité), de fragments lithiques (volcanites mafiques, schistes métamorphiques et roches sédimentaires), de fragments de glauconites et en quantités secondaires de micas et de jaspe. Les grains sont anguleux à subanguleux et le tri faible à bon. On observe un peu de kaolinite dans la matrice. Le ciment est carbonaté avec des parties plus siliceuses devenant parfois dominantes. La pyrite authigène est commune.

Le mudstone et le siltstone argileux sont gris à brunâtres et plus ou moins dolomitiques.

De fines lamines et autres occurrences de bitume sont présentes à plusieurs niveaux et produisent une fluorescence jaune-orange. Par endroits, on observe des veines remplies de dolomie.

Indian Cove: 1794 m-2273 m

La Formation d'Indian Cove a une épaisseur apparente de 479 m, mais elle est tronquée par une faille à la base.
Les 20 m de la partie supérieure sont constitués à 55% de mudstone calcaire gréseux et silteux et à 45 % de grès fin et de siltstone quartzitiques accompagnés d'un peu de shale. On observera des niveaux marqués par la présence de calcite blanchâtre souvent associés à de la fracturation.

Le reste de l'unité est composé de mudstone et de wackestone siliceux et légèrement silteux et gréseux, gris brun à gris foncé. Certains calcaires sont argileux ou dolomitiques, et peuvent renfermer de la matière organique et montrent parfois une fluorescence blanchâtre.

On y observe des traces de bitume et de fragments de plantes. Les fragments de fossiles coquillés sont extrêmement rares par contre les spicules d'éponges sont très abondants.

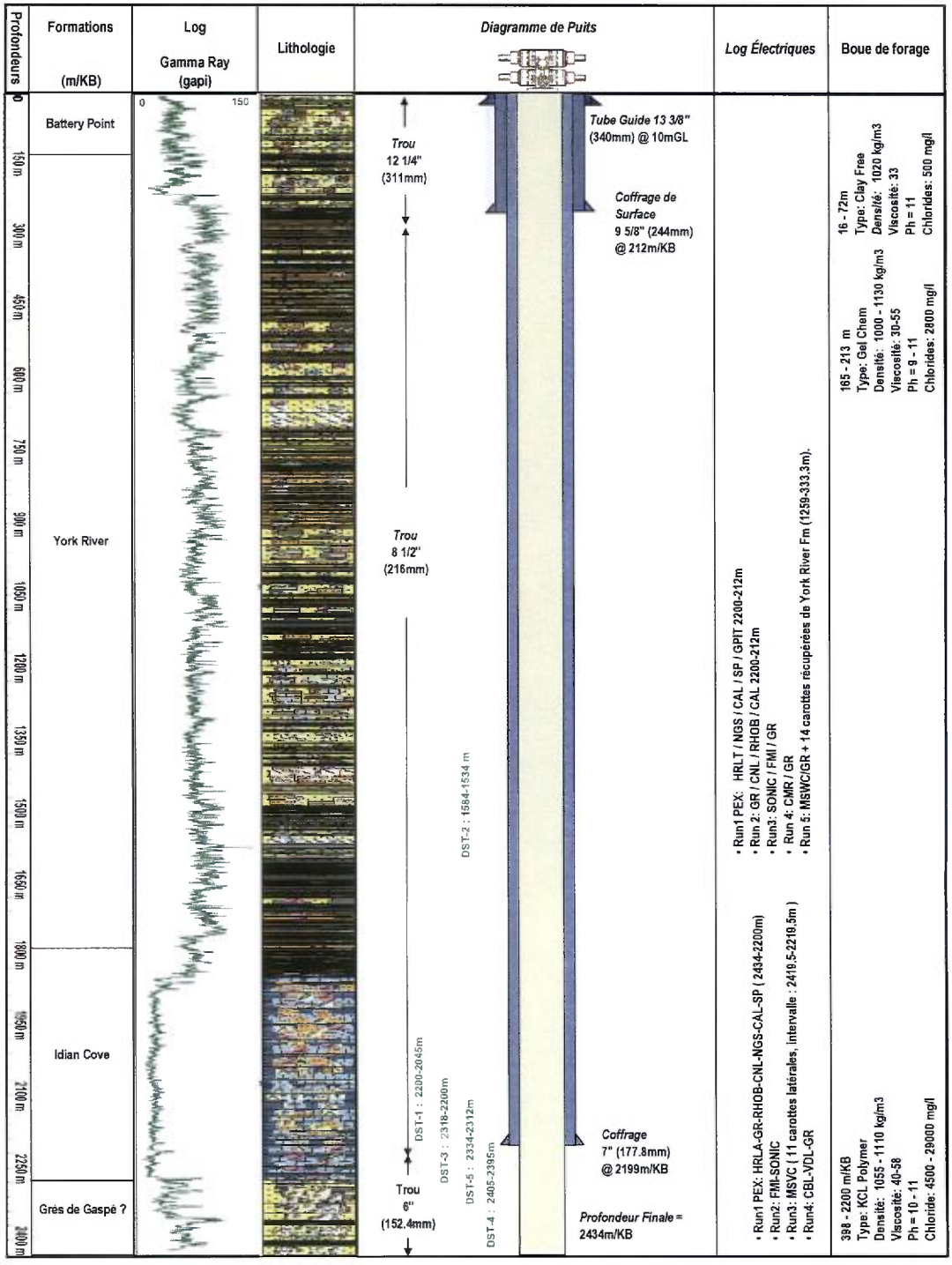
Les derniers mètres de l'unité près de la faille sont constitués d'une brèche à fragments de calcaire cimentés par des carbonates.

Grés de Gaspé (?) : 2273 m- 2434 m (TD)

La section a commencé par 84 m de grès grossier ou très grossier, conglomératique, à grains bien arrondis à subanguleux semblables à ceux de la formation Battery Point. Les grains sont composés à 95% de quartz, de feldspath clairs et de rares fragments lithiques. Le ciment est carbonaté et très abondant près de la zone de faille. On trouve également un ciment siliceux plus ou moins abondant.
Le mudstone représente moins de 1% de la séquence.
Les derniers 77 m ont une granulométrie est plus fine, des mudstones plus fréquents et des grains lithiques plus abondants, semblable a ceux de la formation York River. Le quartz représente environ 85 à 95% des grains. Les feldspaths font jusqu'à 10% et les grains lithiques jusqu'à 8%. Les grains sont anguleux à subarrondis. Le ciment est siliceux ou carbonaté. La matière organique est par endroits abondante.

1.3/ État du puits :

Étant donné que l'on a atteint l'objectif du forage, le puits Pétrolia-Tar Point N° 1 a été suspendu le 07 décembre 2009 pour évaluation / complétion ultérieure.



1.4/ Toit des formations géologiques

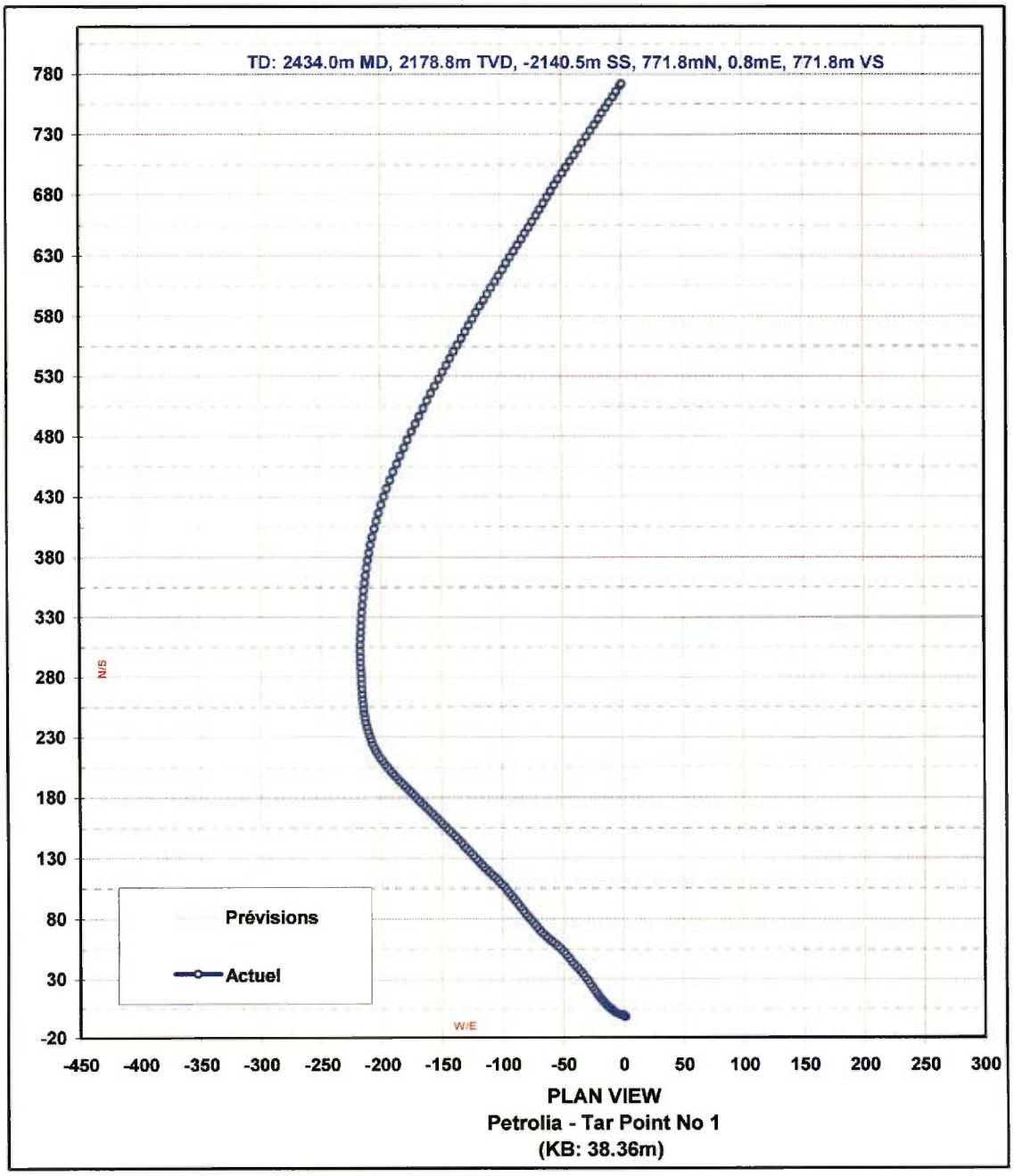
FORMATIONS	Tops (m)		
	mKB/TVD	mKB/MD	mNM
Battery Point Fm-Petit Gaspé	5.0	5.00	33.4
York River	129.0	129.0	-90.6
Idian Cove	1682.0	1794.00	-1643.6
Grès de Gaspé (?)	2048.2	2273.6	-2009.9
Profondeur Total	2178.8	2434.0	-2140.5

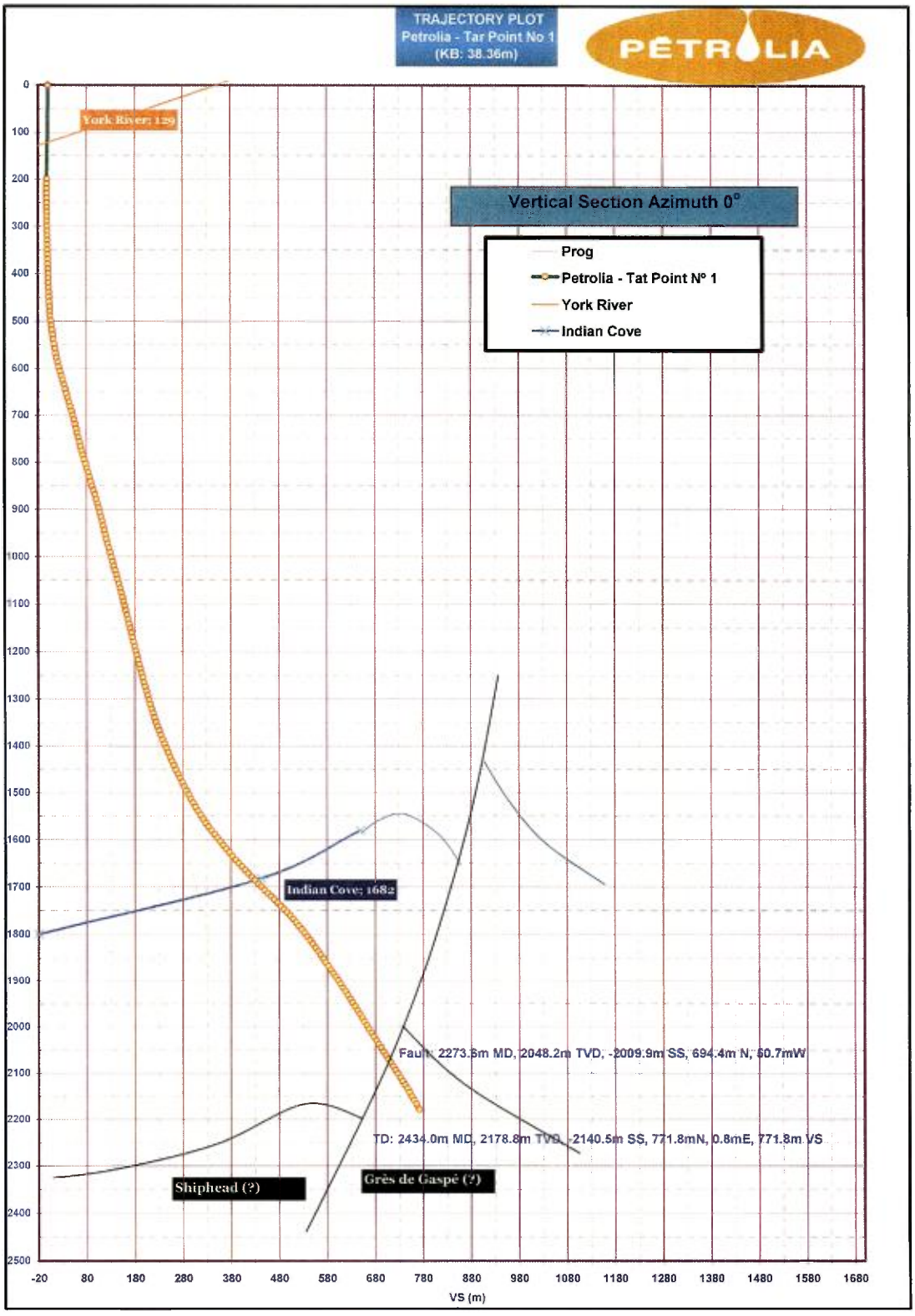
1.5/ Résumé des mesures de déviation

Pour le forage Pétrolia Tar Point N°1, il a été décidé de mettre en place un dispositif directionnel dans le but de donner une orientation préférentielle au puits vers le nord afin d'intersecter les fractures attendues sous un angle plus favorable qu'avec une trajectoire vertical.

A partir de 400m, le puits a été dévié ver le nord ouest (environ 295-320°) avec des équipements directionnels. La déviation du forage a atteint 20.3 ° à 625 m, celle-ci a été maintenue entre 19° et 21° à partir de cette profondeur et 1300 m.
À partir de 1328 m le forage a continué sans outils de contrôle directionnel. La trajectoire du trou a tourné vers le nord – nord est à partir de 1600 m.
L'inclinaison maximale du trou est de 47.9° à 1850 m.
A la profondeur totale finale 2434 mMD (2178.8 mKB/TVD -2140.5 mSS), la déviation du trou est de 33° avec azimute de 32.5° et une section verticale de 772m.

Profondeur (mKB/MD)	Inclination (Deg°)	Azimuth (Deg°)	TVD (m)	N/S (m)	E/W (m)	Dog Leg (Deg/30°)	Vertical Section (m)	Sub Sea (m)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.36
200.00	1.41	140.22	199.98	-1.89	1.57	0.21	-1.89	-161.62
250.00	1.72	291.64	249.96	-1.90	0.80	0.14	-1.90	-211.60
300.00	2.46	296.52	299.93	-1.18	-0.83	0.53	-1.18	-261.57
350.00	3.00	295.78	349.87	-0.14	-2.94	0.59	-0.14	-311.51
400.00	3.59	291.26	399.79	1.00	-5.52	0.55	1.00	-361.43
450.00	4.49	312.90	449.66	3.05	-8.45	1.16	3.05	-411.30
500.00	8.92	316.21	499.35	6.68	-12.49	3.14	6.68	-460.99
550.00	11.45	323.43	548.52	13.50	-18.48	1.86	13.50	-510.16
600.00	17.36	324.07	597.02	23.32	-25.42	4.04	23.32	-558.66
650.00	20.29	319.19	644.14	36.67	-35.46	2.37	36.67	-605.78
700.00	20.43	319.70	691.08	49.68	-46.72	2.04	49.68	-652.72
750.00	19.43	309.84	738.12	61.39	-58.94	0.98	61.39	-699.76
800.00	20.82	318.91	785.09	73.23	-71.26	1.21	73.23	-746.73
850.00	20.13	321.09	831.90	86.62	-82.65	0.30	86.62	-793.54
900.00	20.35	321.11	878.64	100.53	-93.68	2.45	100.53	-840.28
950.00	19.48	313.23	925.77	112.84	-104.93	2.13	112.84	-887.41
990.00	19.26	315.89	963.50	122.03	-114.49	2.00	122.03	-925.14
1000.00	19.29	316.94	972.94	124.42	-116.77	1.04	124.42	-934.58
1050.00	20.77	316.58	1019.84	137.05	-128.65	0.50	137.05	-981.48
1100.00	20.13	315.14	1066.60	149.92	-140.82	1.31	149.92	-1028.24
1150.00	19.21	314.54	1113.52	161.95	-153.21	2.16	161.95	-1075.16
1200.00	18.96	315.15	1160.79	173.37	-164.80	0.32	173.37	-1122.43
1250.00	19.52	314.05	1207.95	185.24	-176.45	1.96	185.24	-1169.59
1300.00	19.44	317.02	1255.09	197.05	-188.18	0.88	197.05	-1216.73
1350.00	19.78	321.64	1302.14	210.03	-199.05	0.53	210.03	-1263.78
1400.00	20.77	337.97	1349.13	224.82	-207.46	3.60	224.82	-1310.77
1450.00	22.62	348.49	1395.60	242.48	-212.70	1.57	242.48	-1357.24
1500.00	24.09	355.28	1441.60	261.86	-215.42	1.21	261.86	-1403.24
1550.00	26.46	357.45	1486.70	283.41	-216.68	0.87	283.41	-1448.34
1600.00	30.47	0.42	1530.87	306.82	-217.20	5.26	306.82	-1492.51
1650.00	35.58	4.33	1572.84	333.91	-215.88	3.07	333.91	-1534.48
1700.00	39.22	7.75	1612.20	364.59	-212.79	3.05	364.59	-1573.84
1750.00	42.56	13.46	1650.28	396.44	-207.02	3.80	396.44	-1611.92
1800.00	46.12	19.64	1686.14	429.90	-197.37	5.15	429.90	-1647.78
1850.00	47.94	24.39	1720.32	463.64	-183.51	1.99	463.64	-1681.96
1900.00	46.09	26.80	1754.12	496.87	-167.60	3.02	496.87	-1715.76
1950.00	42.02	28.81	1790.16	527.50	-151.43	2.10	527.50	-1751.80
2000.00	39.42	29.55	1828.09	555.99	-135.64	1.45	555.99	-1789.73
2050.00	37.85	30.35	1867.47	582.62	-120.16	1.32	582.62	-1829.11
2060.00	37.59	30.50	1875.38	587.90	-117.06	0.85	587.90	-1837.02
2070.00	36.94	31.08	1883.34	593.10	-113.96	2.21	593.10	-1844.98
2080.00	36.74	31.38	1891.34	598.23	-110.85	0.81	598.23	-1852.98
2090.00	36.35	31.57	1899.37	603.31	-107.74	1.23	603.31	-1861.01
2100.00	36.56	32.05	1907.42	608.36	-104.61	1.07	608.36	-1869.06
2150.00	36.16	31.87	1947.57	633.67	-88.89	1.94	633.67	-1909.21
2200.00	34.29	32.66	1988.42	658.02	-73.47	0.63	658.02	-1950.06
2250.00	35.78	32.18	2029.17	682.64	-58.20	0.60	682.64	-1990.81
2300.00	37.20	34.09	2069.39	707.49	-41.93	1.42	707.49	-2031.03
2350.00	36.52	33.79	2109.15	732.64	-25.00	0.98	732.64	-2070.79
2400.00	32.77	33.60	2150.25	756.34	-9.25	1.93	756.34	-2111.89
2430.00	33.04	32.51	2175.48	769.95	-0.40	0.80	769.95	-2137.12
2434.00	33.04	32.51	2178.83	771.79	0.77	0.00	771.79	-2140.47


TD: 2434.0m MD, 2178.8m TVD, -2140.5m SS, 771.8mN, 0.8mE, 771.8m VS
780
730
680
630
580
530
480
430
380
330
280
230
180
130
80
30
-20
N/S
W/E
Prévisions
Actuel
-450 -400 -350 -300 -250 -200 -150 -100 -50 0 50 100 150 200 250 300
PLAN VIEW
Petrolia - Tar Point No 1
(KB: 38.36m)


TRAJECTORY PLOT
Petrolia - Tar Point No 1
(KB: 38.36m)
PÉTROLIA
York River; 129
Vertical Section Azimuth 0°
Prog
Petrolia - Tat Point N° 1
York River
Indian Cove
Indian Cove; 1682
Fault 2273.6m MD, 2048.2m TVD, -2009.9m SS, 694.4m N, 60.7mW
TD: 2434.0m MD, 2178.8m TVD, -2140.5m SS, 771.8mN, 0.8mE, 771.8m VS
Shiphead (?)
Grès de Gaspé (?)
VS (m)

2/ CONSTRUCTION :

2.1/ La boue utilisée

Date	Type	Profendeur (m)	Densité (kg/m³)	Viscosité (s/l)	pH	Chlorides (mg/l)
23-Oct	Clay Free	72	1020	33	11	500
24-Oct	Gel Chem	165	1050	42	10	2800
25-Oct	Gel Chem	213	1130	55	9	2800
26-Oct	Gel Chem	213	1000	30	11	n/a
27-Oct	KCL Polymer	398	1105	43	11	16000
28-Oct	KCL Polymer	640	1065	43	11	11500
29-Oct	KCL Polymer	821	1080	44	10	16500
30-Oct	KCL Polymer	940	1075	10	10	13000
31-Oct	KCL Polymer	1049	1070	42	10	9000
01-Nov	KCL Polymer	1131	1080	40	11	9500
02-Nov	KCL Polymer	1194	1055	40	11	8000
03-Nov	KCL Polymer	1302	1070	44	11	8200
04-Nov	KCL Polymer	1361	1075	44	10	9000
05-Nov	KCL Polymer	1440	1079	44	10	7500
06-Nov	KCL Polymer	1582	1070	44	10	6500
07-Nov	KCL Polymer	1711	1070	44	10	5500
08-Nov	KCL Polymer	1784	1075	45	10	5500
09-Nov	KCL Polymer	1874	1075	45	10	5500
10-Nov	KCL Polymer	1986	1070	53	11	4500
11-Nov	KCL Polymer	2007	1065	51	10	5500
12-Nov	KCL Polymer	2026	1060	48	11	4500
13-Nov	KCL Polymer	2089	1050	51	10	4700
14-Nov	KCL Polymer	2143	1060	50	10	5000
15-Nov	KCL Polymer	2169	1080	43	10	13500
16-Nov	KCL Polymer	2200	1110	58	11	29000
17-Nov	KCL Polymer	2200	1110	58	11	29000
18-Nov	KCL Polymer	2200	1110	58	11	29000
19-Nov	KCL Polymer	2200	1110	58	11	29000
20-Nov	KCL Polymer	2200	1110	58	11	29000
21-Nov	KCL Polymer	2200	1110	58	11	29000
22-Nov	KCL Polymer	2200	1110	48	10	28000
23-Nov	KCL Polymer	2200	1110	48	10	28000
25-Nov	KCL Polymer	2200	1105	48	10	27000
26-Nov	KCL Polymer	2203	1070	60	12	24000
27-Nov	KCL Polymer	2282	1065	51	11	20000
28-Nov	KCL Polymer	2318	1060	50	12	19500
29-Nov	KCL Polymer	2318	1060	56	11	20000
30-Nov	KCL Polymer	2367	1060	52	11	19500
01-Dec	KCL Polymer	2409	1065	54	10	19500
02-Dec	KCL Polymer	2434	1060	52	11	19500

2.2/ Liste des trépans utilisés

Différents types de trépans ont été utilisés durant le forage du Puits Pétrolia Tar Point N°1. En fonction, des lithologies traversées, des objectifs de la compagnie ainsi que la performance des outils, 18 trépans de types PDC et Tricônes ont servi tout au long de ce forage (voir tableau ci-dessous).

Outil N°	Diamètre (mm)	Type	Numéro de Série	Nozzles	Profondeur Début (mKB)	Profondeur Fin (mKB)	Mètres Forés	Heures	Taux de Pénétration (m/hr)	Condition	Poids (daN)	RPM	Déviation (deg°)
1A	311.1	EG1HGLC	L30935	3 x 15.9	13	168	155	29.75	5.2	3-3-FC-A-E-0-No-PR	8000	140	2.50
RR2A	311.1	EG1HGLC	L29324	3 x 15.9	168	213	45	10.50	4.3	3-3-FC-A-E-0-No-PR	8000	140	3.30
1	215.9	MS513M	126128	7 x 9.5	213	398	185	11.00	16.8	1-1-FC-A-E-0-No-KOP	3000	110	3.00
2RR	215.9	MS513M	126128	7 x 9.5	398	640	242	17.50	13.8	2-2-FC-S-X-0-CT-PR	3000	110	18.50
3	215.9	Q505	7900014	7 x 9.5	640	909	269	24.25	11.0	2-2-FC-S-X-0-BC-PR	5000	110	20.00
4	215.9	MSF513M	126765	7 x 9.5	909	1171	262	50.50	5.2	5-4-FC-N-X-0-No-BHA	10000	110	20.00
5	215.9	MS1613	JY8193	6 x 11.1	1171	1328	157	28.25	5.6	4-4-FC-A-X-0-No-PR	10000	110	20.00
6	215.9	MS1616	JY3275	6 x 11.9	1328	1443	115	29.50	3.9	4-4-FC-A-X-0-CT-PR	10000	110	20.00
7	215.9	MSR616	122358	7 x 10.3	1443	1711	268	36.50	7.3	5-4-FC-A-X-0-CT-PR	10000	110	20.00
8	215.9	MSF513M	126766	7 x 9.5	1711	1807	96	10.50	9.1	2-2-FC-A-X-0-CT-DTF	10000	110	20.00
9	215.9	MSF513	126767	7 x 9.5	1807	1986	179	20.25	8.8	3-5-FC-S-X-0-CT-PR	10000	110	20.00
10	215.9	RSR616	125069	7 x 9.5	1986	2026	40	14.75	2.7	6-7-FC-A-X-0-CT-PR	10000	110	38.00
11	215.9	R34ADH	BX3120	3 x 12.7	2026	2143	117	27.00	4.3	8-9-CT-N-F-2-FC-DTF	10000	110	40.00
12	215.9	R40APDH	AC4471	3 x 12.7	2143	2200	57	25.50	2.2	2-5-FC-A-E-0-CT-TD	10000	110	34.00
13	152.4	R30APDH	PW1020	3 x 15.9	2200	2281	81	21.25	3.8	7-6-BT-M-E-0-FC-PR	10000	70	36.50
14	152.4	MSi1613	JY7610	6 x 10.3	2281	2318	37	7.50	4.9	4-4-FC-A-X-0-BT-PR	10000	70	36.50
15	152.4	DSR711M	120043	4 X 12.7	2318	2367	49	9.50	5.1	3-3-FC-A-X-0-NO-TQ	10000	70	37.00
16	152.4	DSR908D	119473	6 X 12.7	2367	2409	42	13.25	3.1	4-4-FC-A-X-0-NO-PR	10000	70	37.00
17	152.4	MA32YPX	JT5758	6 X 12.7	2409	2434	25	5.50	4.5	2-3-FC-G-X-0-CT-RIG	10000	70	37.00

2.3/ Coffrage et ciment

Données du Trou

Section du trou	Intervalle (m)	Diamètre du trou (mm)
Surface	0 – 212 m	311 mm
Verticale	212m -398 m	216 mm
Déviée	398m -2200 m	216 mm
Déviée	2200m – 2434 m	152.4 mm

Données du Coffrage

Type de coffrage	Profondeur (m)	Diamètre du coffrage (mm)
Tube Guide	0-10m	340 mm
Surface	0 -212m	244.5 mm
Production	0-2199m	177.8 mm

SURFACE CASING & CEMENTING SUMMARY

Well Name & Location: **Petrolia, Tar Point No.1 Gaspe, Quebec** Date: 24-oct-09

Type of String: Surface KB Elev.: 38.36 m GL Elev.: 33.34 m

Size: 244.5 mm Wt.: 59.53 kg/m Grade: J55 Thread: LT&C Make: TKM

Casing Bowl: (make/model) Cameron IC-9 Size: 244.5mm x 279mm Rating: 21 000 kPa

Total Joints on Lease:	18	Total Length:	213.25 m
Total Joints Run in Hole:	18	Total Length:	213.25 m
Type of Shoe:	Weatherford K55	Length of Shoe:	0.48 m
Type of Collar:	Weatherford K55	Length of Collar:	0.35 m
Other:	No	Length of Other:	m
Total Length of String:	214.08	Casing Landed at:	212.00 mKB

Centralizers: Centralize every 50m

Scratchers: None

Float Collar at: 198.82 mKB Stage Collar at: mKB

Marker Joint at: mKB at: mKB

Pipe Movement: Reciprocate casing 1m while mixing cement

Cement Stage #1:

Lead Slurry: Type: Class G Mass: 14.0 tonne

Volume: 11.07 n3 from 112.00 mKB to 0.00 mKB

Additives 2.0% CaCl + 0.2% D46

Tail Slurry: Type: Mass: tonne

Volume: m3 from: mKB to mKB

Additives

Cement Stage #2:

Lead Slurry: Type: Mass: tonne

Volume: m3 from: mKB to mKB

Additives

Tail Slurry: Type: Mass: tonne

Volume: m3 from: mKB to mKB

Additives

Remarks: Job went ok. 1.5m3 of good cement to surface.

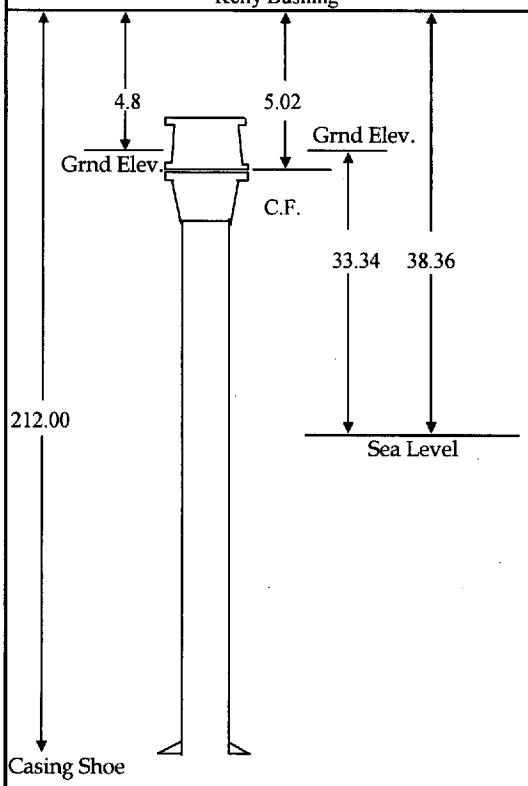
SURFACE CASING & CEMENT REPORT

Date: October 25/09 Type of String: Surface

Well Name: **Petrolia, Tar Point No.1** KB Elevation: 38.36 m

Size: 244.5 mm Weight: 59.53 kg/m Grade: J55 Thread: LT&C Make: TKM

Casing Bowl: Make/Model: Cameron/IC-9 Size: 244.5m x 279.4mm Rating: 21 000 kPa



Type of Shoe: Weatherford K55

Type of Float Collar Weatherford K55

Float Collar @: 198.82

Other Fittings: None

Centralizers: 5 Bow springs

Scratchers: None

Plugs Used: Top

Welding: Yes

Casing Shoe @: 212

Time Started in Hole: 19:45

Time Casing Completed: 21:36

Time Started Circulating: 21:53

Time Stopped Circulating: 22:35

Time Started Cementing: 23:15

Time Cement in Pipe: 23:25

Time Plug on Bottom: 23:59

Tonnes of Cement Used: 14.0

Type of Cement: Class G

Additives: 2.0% CaCl2, 0.2% D46

Cementing Company: Schlumberger

Cementer: Craig Black

Remarks: Good job with 1.5m3 of

Good cement to surface

Supervisor: Marcel Yurchak

PRODUCTION CASING & CEMENTING SUMMARY

Well Name & Location: **Petrolia, Tar Point # 1 Gaspe Quebec** Date: 25-nov-09

Type of String: Production KB Elev.: 38.36 m GL Elev. 33.34 m

Size: 177.8 mm Wt.: 38.69 kg/m Grade: J55 Thread: LT&C Make: IPSCO

Casing Bowl: (make/model) Cameron IC-9 Size: 244.5mm x 279mm Rating: 21 000 kPa

Total Joints on Lease:	173	Total Length:	2306.06 m
Total Joints Run in Hole:	165	Total Length:	2198.10 m
Type of Shoe:	Weatherford float shoe	Length of Shoe:	0.44 m
Type of Collar:	Weatherford float collar	Length of Collar:	0.44 m
Other:	Topco stage tool	Length of Other:	0.73 m
Total Length of String:	2199.71	Casing Landed at:	2199.00 mKB

Centralizers: 31

Scratchers: None

Float Collar at: 2185.01 mKB Stage Collar at: 1496.52 mKB

Marker Joint at: mKB at: mKB

Pipe Movement: No

Cement Stage #1:

Lead Slurry: Type: RFC Lite Mass: 2.3 tonne

Volume: 3.00 m3 from 2200.00 mKB to 1495.00 mKB

Additives 2.2% BOB810 + 1.5% DO79

Tail Slurry: Type: Class G Mass: 13.0 tonne

Volume: 10.00 m3 from 2200.00 mKB to 1495.00 mKB

Additives

Cement Stage #2:

Lead Slurry: Type: RFC Lite Mass: 22.7 tonne

Volume: 29.20 m3 from 1496.50 mKB to 0.00 mKB

Additives 2.2% BO810, 1.5% DO79

Tail Slurry: Type: Mass: tonne

Volume: m3 from: mKB to mKB

Additives

Remarks: Cement job went ok with no problems. 6.0m3 of good cement to surface.

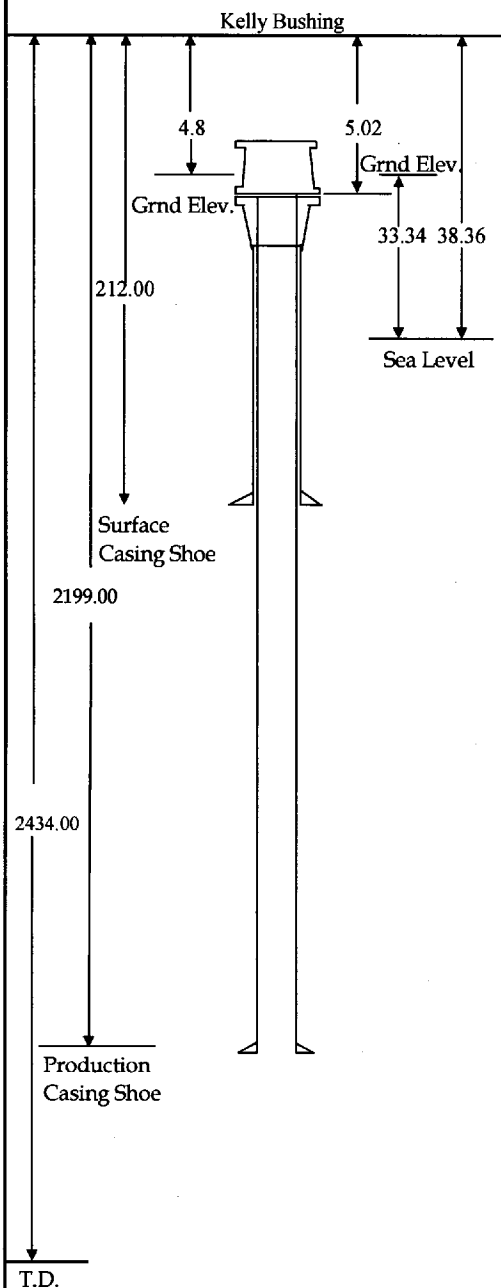
PRODUCTION CASING & CEMENT REPORT (Stage 1)

Date: November 24/09 Type of String: Production

Well Name: **Petrolia, Tar Point # 1** KB Elevation: 38.36 m

Size: 177.8 mm Weight: 38.7 kg/m Grade: J55 Thread: LT&C Make: IPSCO

Casing Bowl: Make/Model: Cameron IC-9 Size: 244.5mm x 279mm Rating: 21 000 kPa



Type of Shoe:	Weatherford Float shoe
Type of Float Collar:	Weatherford Float collar
Float Collar @:	2185.01
Other Fittings:	Stage tool at 1496.52m
Centralizers:	2
Scratchers:	None
Plugs Used:	Flimsy plug, Bomb
Welding:	No
Casing Shoe @:	2199
Time Started in Hole:	Nov.22/09 9:30:00 PM
Time Casing Completed:	Nov.24/09 at 1:30
Time Started Circulating:	Nov.24/09 at 1:35
Time Stopped Circulating:	Nov.24/09 at 19:30
Time Started Cementing:	Nov.24/09 at 19:35
Time Cement in Pipe:	Nov.24/09 at 19:48
Time Plug on Bottom:	Nov.24/09 at 21:13
Tonnes of Cement Used:	2.3 tonne/13.0 tonne
Type of Cement:	RFC Lite/Class "G"
Additives:	2.2%B810 + 1.5% DO79
Cementing Company:	Schlumberger
Cementer:	Chris Lemay
Remarks:	No problems

Open stage tool at 22:04 hrs. 6.0 m3 cmt returns to su

Supervisor: Marcel Yurchak

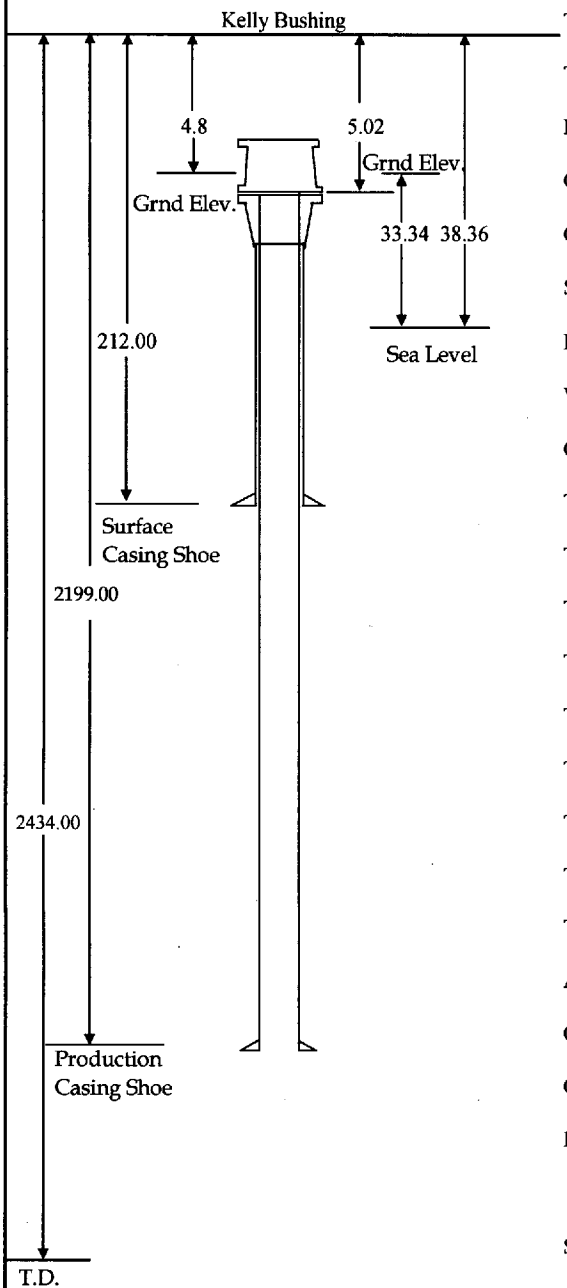
PRODUCTION CASING & CEMENT REPORT (Stage 2)

Date: November 24/09 Type of String: Production

Well Name: **Petrolia, Tar Point # 1** KB Elevation: 38.36 m

Size: 177.8 mm Weight: 38.7 kg/m Grade: J55 Thread: LT&C Make: IPSCO

Casing Bowl: Make/Model: Cameron IC-9 Size: 244.5mm x 279mm Rating: 21 000 kPa



Type of Shoe:	Weatherford Float shoe
Type of Float Collar:	Weatherford Float collar
Float Collar @:	2185.01
Other Fittings:	Stage tool at 1496.52m
Centralizers:	29
Scratchers:	None
Plugs Used:	Topco
Welding:	No
Casing Shoe @:	2199
Time Started in Hole:	Nov.22/09 9:30:00 PM
Time Casing Completed:	Nov.24/09 at 1:30
Time Started Circulating:	Nov.24/09 at 1:35
Time Stopped Circulating:	Nov.25/09 at 09:40
Time Started Cementing:	Nov.25/09 at 09:52
Time Cement in Pipe:	Nov.25/09 at 09:54 hrs
Time Plug on Bottom:	Nov.5/09 at 11:14
Tonnes of Cement Used:	22.7 tonne RFC Lite
Type of Cement:	RFC Lite
Additives:	2.2% B810 + 1.5% DO79
Cementing Company:	Schlumberger
Cementer:	Chris Lemay
Remarks:	No problems. 6.0m3 of cement to surface.
Supervisor:	Marcel Yurchak

3/ EVALUATION

3.1/ Description des carottes latérales

Side-wall Cores Description

Sidewall Core 1: 1259.0 m Sandstone 100%: light to medium grey and greenish-grey, translucent transparent and frosted quartz 87%, white with yellowish and flesh feldspar 5% lithic grains 6%, mafic rocks 2-3%, scattered fine muscovite and occasionally biotite flakes, traces glauconite, upper fine to upper medium, angular to subrounded, well sorted, clear subeuhedral locally clear and frosted quartz overgrowth infill pores, quartz cement and matrix 95% replacement dolomite 3% and locally moderate calcite cement, low relief, non visible porosity, very scattered amber to rare dark brown bitumen in pores, orange uncut fluorescence from bitumen fill pores, no other shows, Sneider Type III

Sidewall Core 2: 1233.0 m Sandstone 100%: light to medium grey and greenish-grey, translucent transparent and frosted quartz 80%, white with yellowish and flesh feldspar 6% lithic grains 10%, mafic rocks 4%, scattered fine muscovite and occasionally biotite flakes, traces glauconite, jasper traces, upper fine to upper medium with scattered lower fine, angular to subrounded, well to moderately sorted, clear subeuhedral locally drusy and frosted quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 3% and traces calcite cement, low to medium relief, scattered interparticulate and very rare pinpoint porosity, no shows, Sneider Type III and II.

Sidewall Core 3: 1227.0 m Sandstone 100%: light to medium grey and greenish-grey, translucent transparent and frosted quartz 80%, white with yellowish and flesh feldspar 6% lithic grains 10%, mafic rocks 4%, scattered fine muscovite and occasionally biotite flakes, traces glauconite, jasper traces, upper fine to upper medium with scattered lower fine, angular to subrounded, well to moderately sorted, clear subeuhedral locally drusy and frosted quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 3% and traces calcite cement, massive without grain orientation or visible stratification, low to medium relief, scattered interparticulate and very rare pinpoint porosity, no shows, Sneider Type III and II.

Sidewall Core 4: 1087.0 m Sandstone 100%: light to medium and greenish-grey, translucent and frosted quartz 75%, white with traces of yellowish and flesh feldspar 6% lithic grains 15%, mafic rocks 3%, scattered fine muscovite and occasionally biotite flakes, jasper traces, lower to upper medium with scattered lower coarse, angular to subrounded, well sorted, clear subeuhedral and frosted quartz overgrowth infill pores, quartz cement and matrix 98% replacement dolomite 2% and traces calcite cement, massive without grain orientation or visible stratification, low to medium relief, few hear thin sub-vertical fractures infilled with amber and medium brown bitumen and calcite, scattered interparticulate porosity locally infilled with amber to rare dark brown bitumen, orange uncut fluorescence in micro-fractures from bitumen, no other shows, Sneider Type III and II.

Sidewall Core 5: 781.0 m Shale 100%: medium-dark brownish-grey, very siltitic to locally slightly siltitic, abundant organic material, blocky, medium indurated, parallel bedding slickenside surfaces.

Sidewall Core 6: 757.0 m Sandstone 100%: light to medium and greenish-grey, translucent and frosted quartz 76%, white and yellowish and very rare pink feldspar 8%, lithic grains 12%, mafic rocks 3%, scattered fine muscovite and occasionally biotite flakes, jasper traces, lower to upper medium with scattered lower coarse, angular to subrounded, well sorted, clear subeuhedral and frosted quartz overgrowth infill pores, quartz cement and matrix 98% replacement dolomite 2%, massive without grain orientation or visible stratification, low to medium relief, one hear thin sub-vertical fractures edge coated with calcite and bitumen traces, scattered

interparticulate porosity infilled with amber to dark brown bitumen, orange uncut fluorescence in micro-fractures from bitumen, no other shows, Sneider Type III and II.

Sidewall Core 7: 749.0 m Sandstone 100%: light to medium and greenish-grey, translucent and frosted quartz 76%, white and yellowish and very rare pink feldspar 8%, lithic grains 12%, mafic rocks 3%, scattered fine muscovite and occasionally biotite flakes, jasper traces, lower to upper medium with scattered lower coarse, angular to subrounded, well sorted, clear subeuhedral and frosted quartz overgrowth infill pores, quartz cement and matrix 98% replacement dolomite 2%, massive without grain orientation or visible stratification, low to medium relief, one hear thin sub-vertical fractures edge coated with calcite and bitumen traces, scattered interparticulate porosity infilled with amber to dark brown bitumen, orange uncut fluorescence in micro-fractures from bitumen, no other shows, Sneider Type III and II.

Sidewall Core 8: 729.0 m Sandstone 100%: light to medium and greenish-grey, translucent and frosted quartz 76%, white and yellowish and very rare pink feldspar 8%, lithic grains 12%, mafic rocks 3%, scattered fine muscovite and occasionally biotite flakes, jasper traces, upper fine to upper medium, angular to subrounded, well sorted, clear and frosted subeuhedral quartz overgrowth infill pores, quartz cement and matrix 98% replacement dolomite 2% and calcite traces, massive without grain orientation or visible stratification, low to medium relief, one hear thin sub-vertical fractures edge coated with calcite, scattered interparticulate porosity infilled with amber to dark brown bitumen, orange uncut fluorescence in micro-fractures from bitumen, no other shows, Sneider Type III and scattered II.

Sidewall Core 9: 713.0 m Sandstone 100%: light grey and greenish-grey, translucent and frosted quartz 90%, white and yellowish and very rare pink feldspar 5%, lithic grains 4%, mafic rocks traces, lower fine to lower medium, angular to subrounded, well sorted, clear and frosted subeuhedral quartz overgrowth infill pores, quartz cement and matrix 98% replacement dolomite 2% and calcite traces, sub-mm to one mm thick sandstone interbedded with amber and medium brown bitumen and organic matter with 25-30° inclination and parallel bedding, low to medium relief, orange uncut fluorescence from bitumen, fainted slow developing white cut, weak straw yellow fluorescence, tight to scattered interparticulate porosity 5%, Sneider Type III and II.

Sidewall Core 10: 614.0 m Sandstone 100%: greenish-grey, translucent frosted quartz 74%, white and yellowish and very rare pink feldspar 10%, lithic grains 8%, mafic rocks 5%, traces jasper, traces glauconite, scattered pyrite nodules, fine to medium size rare muscovite flacks, upper fine to upper medium, jasper traces, upper fine to upper medium, angular to subrounded, well sorted, clear and frosted subeuhedral quartz overgrowth infill pores, quartz cement and matrix 98% replacement dolomite 2% and calcite traces, massive without grain orientation or visible stratification, low to medium relief, one hear thin sub-vertical fractures edge coated with calcite and amber bitumen, orange uncut fluorescence in micro-fractures from bitumen, tight, no other shows, Sneider Type III.

Sidewall Core 11: 593.6 m Sandstone 100%: greenish-grey, translucent frosted quartz 76%, white and yellowish and very rare pink feldspar 9%, lithic grains 12%, mafic rocks 3%, traces jasper, scattered pyrite nodules, fine to medium size rare muscovite flacks, upper fine to upper medium, upper fine to upper medium, angular to subrounded, well sorted, clear and frosted subeuhedral quartz overgrowth infill pores, quartz cement and matrix 98% replacement dolomite 2% and calcite traces, massive without grain orientation or visible stratification, low to medium relief, one hear thin sub-vertical fracture edge coated with calcite and amber bitumen, orange uncut fluorescence in micro-fractures from bitumen, tight, no other shows, Sneider Type III.

Sidewall Core 12: 548.9.0 m Shale 100%: medium grey, very slightly siltitic, blocky, medium indurated

Sidewall Core 13: 486.1 m Sandstone 100%: greenish-grey, translucent frosted quartz 74%, white and yellowish and rare pink feldspar 8%, lithic grains 12%, mafic rocks 5%, traces jasper, traces glauconite, scattered pyrite nodules, fine to medium size rare muscovite flacks, upper fine to upper medium, angular to subrounded, moderately sorted, clear and frosted subeuhedral quartz overgrowth infill pores, quartz cement and matrix 90% replacement dolomite 8% and calcite 2%, massive without grain orientation or visible stratification, low to medium relief, hear thin sub-vertical fracture edge coated with amber bitumen, orange uncut fluorescence in micro-fractures from bitumen, no other shows, tight, Sneider Type III.

Sidewall Core 14: 333.3 m Sandstone 100%: greenish-grey, translucent frosted quartz 78%, white and yellowish and rare pink feldspar 6%, lithic grains 12%, mafic rocks 5%, traces jasper, fine to medium size rare muscovite flacks, upper fine to upper medium, angular to subrounded, well sorted, clear and frosted subeuhedral quartz overgrowth infill pores, quartz cement and matrix 94% replacement dolomite 5% and calcite 1%, massive without grain orientation or visible stratification, tight, no shows, Sneider Type III.

Sidewall Core 15: 2419.5 m Dolomitic Sandstone 100%: light grey and grey-brownish with dark grey to black thin organic matter layers, clear translucent and frosted quartz 94%, lithic grains 5%, traces feldspar, scattered pyrite nodules, micromicaceous in part, upper very fine to upper fine and traces of lower medium, angular to rare subrounded, moderate sorted, quartz overgrowth infill pores, dolomite cement, very fine quartz matrix, frequent hear thin interbeds with abundant organic material – plant fragments - and black bitumen in very thin layers and pores space, low relief, orange uncut fluorescence with scattered bright yellow spots, instant milky white cut, pale yellow fluorescence.

Sidewall Core 16: 2383 m Dolomitic Sandstone 100%: light grey and grey-brownish, clear translucent and frosted quartz 90%, lithic grains 10%, traces feldspar, traces glauconite, scattered micromicaceous, upper fine to upper medium with traces of lower coarse, angular to rare subrounded, moderate to poor sorted, quartz overgrowth infill pores, dolomite and quartz cement, rare very fine quartz matrix, low to scattered medium relief, antiparticle porosity 5-7%, spotted bleeding oil, spotted oil stain, strong pleasant oil smell, abundant bright white uncut fluorescence, instant translucent-milky white cut, bluish-white fluorescence **Shale:** dark brown carbonaceous scattered very thin lenses.

Sidewall Core 17: 2372 m Dolomitic Sandstone 100%: light grey and grey-brownish, clear translucent and frosted quartz 88%, lithic grains 12%, traces feldspar, traces glauconite, scattered pyrite, upper fine to upper medium and traces of lower coarse, angular to rare subrounded, moderate to poor sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 90-95% with dolomite 5%, occasionally organic material and amber bitumen, low with scattered medium relief, poor to fair interparticulate porosity 3-5%, very scattered spotted bleeding oil, spotted oil stain, weak oil smell, moderate bright white uncut fluorescence, instant translucent-milky white cut, bluish-white fluorescence.

Sidewall Core 18: 2330.5 m Sandstone 100%: off white to light grey, translucent, abundant clear and locally frosted quartz 95%, lithic grains 5%, traces feldspar, traces very small pyrite nodules, lower to upper medium and traces of lower coarse with lower very coarse lithic and quartz elements, angular to rare subrounded, moderate sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 97% and replacement dolomite 3%, low with scattered medium relief, poor to fair interparticulate porosity 5-12%, moderate organic matter coating pores and thin sub-vertical fractures, orange-brownish uncut fluorescence from organic matter, tight, no shows.

Sidewall Core 19: 2322 m Quartz Micro-Breccia 100%: off white to light grey, translucent, abundant clear and locally frosted quartz 97%, lithic grains 3%, upper medium and traces of upper very coarse with 3-5% 1-3mm angular quartz elements, angular, moderate sorted, clear quartz overgrowth completely infill pores, quartz cement and matrix 97%, low relief, poor tight, **Thin Fractures:** quartz fragments and organic matter coating

pores in thin sub-vertical fractures, very spotted oil stain, orangebrownish uncut fluorescence from organic matter, tight, instant translucent-milky white cut, bluish-white fluorescence.

Sidewall Core 20: 2316 m Sandstone 100%: off white, translucent to abundant clear and locally frosted quartz 95%, lithic grains 5%, traces feldspar, traces pyrite nodules, lower to upper medium and traces of lower coarse, angular to rare subrounded, moderate sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 93% and replacement dolomite 3% and calcite cement 4%, low with scattered medium relief, poor interparticulate porosity 3-5%, occasionally organic material and bitumen infill thin fractures, tight, no shows.

Sidewall Core 21: 2273.8m Dolomitic Calcareous Shale 100%: dark greyish-brown to black, blocky, medium indurated, fractured with slickenside surfaces.

Sidewall Core 22: 2273.5 m Brecciaed Limestone 100%: medium and abundant dark brown, moderate siliceous, with abundant disseminated plant fragments, cryptocrystalline mudstone, brecciaed and completely cemented with calcite and secondary dolomite, when open fracture 1-3mm idiotopic clear dolomite and prismatic calcite coated with dark brown bitumen, light brown oil stain, fainted oil smell, bright white uncut fluorescence, instant milky white cut, bluish-white to straw fluorescence.

Sidewall Core 23: 2272.5 m Brecciaed Limestone 100%: medium and abundant dark brown, moderate siliceous, with abundant disseminated plant fragments, cryptocrystalline mudstone, brecciaed and completely cemented with calcite and scattered dolomite, tight, no shows.

Sidewall Core 24: 2253 m Limestone 90%: light to medium brown grading locally to cream and mottled in part cream and brown, moderate siliceous grading to cherty limestone, cryptocrystalline silica matrix with calcite and locally dolomite grains, non to very slightly argillaceous, very scattered pyrite nodules, non to scattered fine disseminated organic matter and plant fragments, non fossiliferous, cryptocrystalline to rare microcrystalline, structureless, low relief, tight, with abundant **Calcite Healed Fractures and Veins 10%:** hear thin to cm infill with very light cream, scattered milky, locally translucent, hypidiomorphic microcrystalline to fine grained equate crystalline and prismatic calcite, clean contacts with the host rock, tight, no shows.

Sidewall Core 25: 2233.5 m Limestone 95%: medium to dark brown and grey-brown, moderate siliceous cryptocrystalline mudstone, slightly dolomitic, slightly to abundant argillaceous, fine disseminated organic matter and plant fragments, non fossiliferous, structureless, low relief, tight, **Calcite Healed / Partially Open Fractures and Veins 5%:**, white to very light cream, scattered milky, locally translucent, hypidiomorphic microcrystalline to medium and coarse grained equate locally crystalline and prismatic calcite, scattered fibrous calcite, clean contacts with the host rock, white bright uncut fluorescence on open fractures and veins, instant translucent-milky white cut, bluish-white fluorescence.

Sidewall Core 26: 2219.5 m Limestone 100%: grey-brown, moderate siliceous, cryptocrystalline mudstone, slightly dolomitic, slightly argillaceous, fine disseminated organic matter and plant fragments, non fossiliferous, structureless, low relief, tight, no shows.

3.2/ Diagraphies Enregistrées

Lors du Forage Pétrolia-Tar Point N°1, deux étapes d'enregistrement des diagraphies ont été effectuées par Schlumberger.

Suite 1 :
Premier enregistrement : Date du 17 Novembre au 18 Novembre 2009.
Intervalle: 2200m-212m

- **Run 1** PEX : HRLT-NGS-CAL-SP-GPIT (2200-212m)
- **Run 2:** GR-CNL-RHOB-CAL (2200-212m)
- **Run 3:** FMI-SONIC-GR (2200-212m) (MSD 2200-212m) (FMI 2190-1850m & 1610-1180m)
- **Run 4:** CMR-GR (1600-400m)
- **Run 5:** MSWC-GR (14 carottes récupérées de York River Fm) (1259-333.3m).

Suite 2 :
Deuxième enregistrement : Date du 05 Décembre au 06 Décembre 2009.
Intervalle : 2434-2200m

- **Run1** PEX : HRLA-GR-RHOB-CNL-NGS-CAL-SP (2434-2200m)
- **Run2:** FMI-SONIC-GR (2419-2198m)
- **Run3:** MSVC (11 carottes latérales, intervalle : 2419.5-2219.5m)
- **Run4:** CBL-VDL-GR (2200-212m)

Résumé des diagraphies enregistrées

Run	Intervalle (m)	Logs Enregistrés
Suite 1		
1	2200-212	HRLT - NGS - CAL - SP - GPIT
2	2200-212	GR - CNL - RHOB - CAL
3	2200-212	FMI – SONIC – GR (MSD 2200-212m) (FMI 2190-1850m & 1610-1180m)
4	1600-400	GR - CMR
5	1259-333.3	MSCT- GR (14 carottes latérales récupérées)
Suite 2		
1	2434-2200	HRLA – GR – RHOB – CNL – NGS – CAL - SP
2	2419-2198	FMI - SONIC - GR
3	2419.5-2219.5	MSCT – GR (11 carottes latérales récupérées)
4	2200-212	CBL – VDL - GR

3.3/ Résultats des essais aux tiges

Cinq tests ont été effectués sur le puits Pétrolia-Tar Point N°1, sur différents intervalles.

DST N°1 : Intervalle 2200-2045 m

Descente du Train de test avec un Packer à 2045m.

- Puits ouvert pour débit initial à 16H55 pour 15 min : Arrivée d'air à la surface.
- Fermeture pour BU (remontée de pression) initiale (4 heures).
- Ouverture puits pour débit: arrivée de gaz à la surface après environ 20min.
- Après 60min sur duse = 3.175 mm, Température = -4°C, Pt = 17.2 kPa et Débit = 125 m3/j.
- Le puits a été fermé à 22h15 pour remontée finale de pression, d'une durée de 8 heures.
- Ensuite, remontée des tiges avec un liquide : 50m de boue gazéifiée + condensat (huile très légère). L'estimation équivaut à 100 litres pour une ouverture de 1.25 h.
- La chambre d'échantillonnage était remplie de gaz et condensat (pas de boue ni eau).

DST N°2 : Intervalle 1584-1534 m

Packer Supérieur à 1529m, Packer Inférieur à 1584m

- Ouverture pour débit initial à 23h05 pour 15 min. Bulles d'air à la surface, pas de gaz, pas de fluide à la surface.
- Fermeture pour remontée de pression (BU) de 23h20 à 03h55 = 4h35min
- Ouverture pour débit principal à 03h55 pour une heure. Bulles d'air à la surface, pas de gaz, pas de fluide à la surface.
- Fermeture pour BU Final de 04h55 à 13 h (durée 8 h 15.

DST N°3 : 2318-2200 m

Packer à 2194m

Descente Train de test. Packer @ 2194m (dans le coffrage 7").

- Le puits a été ouvert pour débit initial à 03H29 pour 20 min : Air à la surface. Fermeture pour BU (remontée de pression) initial de 4 heures.
- Ouverture puits pour une heure à partir de 08h00: arrivée de gaz à la surface après environ 2min.
- Choke = 3.175 mm Température = -4°C. Estimation à partir des pressions en tête:
  - 10min Pt = 0.75 kPa Débit = 18.5 m3/j
  - 60min Pt = 0.25 kPa Débit = 10.7 m3/j.

- Puits fermé pour BU final de 8 heures. Niveau de liquide dans les tiges à la remontée, équivaut à 23.8 m boue peu gazéifiée + traces d'huile.

La chambre d'échantillonnage était remplie de gaz (pas de boue, huile ou eau).

DST N°4 : Intervalle 2405-2395 m

Straddle Packers @ 2405 & 2395m m (en trou ouvert).

- Le puits a été ouvert pour débit initial à 01:25 am pour 15 min : Rien à la surface.
- Fermeture pour remontée de pression initiale de 4 heures.
- Ouverture puits pour débit pour une heure à partir de 05:40am: Quelques bulles d'air à la surface.
- Fermeture pour remontée de pression finale à 06:40 (durée 4 heures).
- Désencrage Packer et Remonter a 10h40min.
- Niveau de liquide dans les tiges: +/- 6 m (21.1 litters) boue.
- La chambre d'échantillonnage était remplie de gaz à faible pression (20 psi) (pas de boue, huile ou eau). 1 échantillon de gaz récupérés pour analyse.

DST N°5 : Intervalle 2334-2312 m

Straddle Packers à 2334.2m - 2311.7m (en trou ouvert).

- Le puits a été ouvert pour débit initial à 01:45 am pour 15 mn : Faible bulles d'air à la surface.
- Fermeture pour remontée de pression initiale de 4 heures.
- Ouverture puits pour débit pour une heure à partir de 06:00 am. Aucun signe à la surface.
- Fermeture pour remontée de pression finale à 07:00 pour 4 heures (Aucun signe à la surface).
- Désancrage packers et remontée à 11:00 am. Niveau de liquide dans les tiges: +/- 7.5 m boue.
- La chambre d'échantillonnage était remplie de boue (pas de gaz, ni huile).

ANNEXES

- **Annexe 1 : Description des déblais de forage**
- **Annexe 2 : Rapports Journaliers de forage**
- **Annexe 3 : Rapports Journaliers de la boue**
- **Annexe 4 : Rapports Journaliers géologiques**
- **Annexe 5 : Rapports des tests**
- **Annexe 6 : Plan d'arpentage**
- **Annexe 7 : Striplog**

ANNEXE 1

DESCRIPTION DES DEBLAIS DE FORAGE

Description géologique des déblais de forage :

Des échantillons de déblais de forage ont été récupérés tout au long du forage tous les 3 métres.

SAMPLE DESCRIPTION

Battery Point Fm - Petit Gaspe Mbr

10-25 m Sandstone 100%: light grey to greenish-grey, translucent to transparent and frosted quartz 92%, white and yellowish with traces of pink feldspar 3-4%, lithic grains 3%, traces of mafic rocks, glauconite <1%, jasper traces, occasionally pyrite nodules, lower medium to upper coarse, angular to subrounded, poor to medium sorted, grain supported fabric with abundant quartz overgrowth infilling pores, quartz cement and matrix 95% and mainly replacement dolomite and occasionally calcite relicts cement 5%, kaolinite 1-2%, interbedded with medium to upper coarse sandstone micro-conglomerate and conglomerate with Fe-oxide coatings and weak cements with gravel size quartz and grey siltstone fragments, with abundant intercrystalline and pinpoint porosity, no shows.

25-35 m Sandstone 100%: light grey to greenish-grey, translucent to transparent and frosted quartz 90%, white and yellowish with traces of pink feldspar 4%, lithic grains 4%, traces of mafic rocks 2%, glauconite traces, occasionally pyrite nodules, lower medium to upper coarse, angular to subrounded, poor to medium sorted, grain supported fabric with abundant quartz overgrowth infilling pores, quartz cement and matrix 65% and mainly replacement dolomite and calcite relicts cement 35%, kaolinite 1-2%, interbedded with medium to upper coarse sandstone micro-conglomerate and conglomerate 20% with Fe-oxide coatings and weak cements with gravel size quartz and grey siltstone fragments, with abundant intercrystalline and pinpoint porosity, no shows.

35-38m Siltstone 100%: light to medium grey, lower very fine quartz 75% with argillaceous matrix 25% and quartz and dolomite occasionally very fine idiotopic crystalline cements, traces dark brown to black bitumen and plant fragments, tight, no shows.

38-52 m Sandstone 97%: light grey to greenish-grey, translucent to transparent and frosted quartz 95%, white and yellowish feldspar 2% with pink feldspar 1%, lithic grains 2%, traces of mafic rocks, glauconite traces and locally abundant, occasionally pyrite nodules, lower medium to lower very coarse, angular to subrounded, poor to medium sorted, grain supported fabric with abundant quartz overgrowth infilling pores, quartz cement and matrix 85% and replacement dolomite and secondary calcite relicts cement 15%, kaolinite 1-2%, interbedded with medium to upper coarse sandstone 5% with Fe-oxide coatings, with scattered intercrystalline and pinpoint porosity, fainted (46m) milky white cut, pale yellow fluorescence, **Siltstone 3%:** light to medium grey, lower very fine quartz 75% with argillaceous matrix 25% and quartz and dolomite occasionally very fine idiotopic crystalline cements, traces dark brown to black bitumen and plant fragments, tight, no shows.

52-76 m Sandstone 99%: light grey interbedded with greenish-grey, translucent to transparent and frosted quartz 88-94%, white and yellowish feldspar 2% with pink feldspar 1%, lithic grains 2%, traces of mafic rocks, locally abundant glauconite, occasionally pyrite nodules, lower medium to lower coarse

interbedded with upper medium to very coarse and gravel size (micro-conglomerate), angular to subrounded, poor to medium sorted, grain supported fabric with abundant quartz overgrowth infilling pores, quartz cement and matrix 85% replacement dolomite 14% and secondary calcite relicts cement 1-2%, kaolinite 1-2%, scattered and locally abundant black bitumen thin layers, interbedded with medium to upper coarse red sandstone 1-2% with Fe-oxide coatings, intercrystalline and pinpoint porosity 10-12%, no shows, **Siltstone 1-2%:** light to medium grey, lower very fine quartz 75% with argillaceous matrix 25% and quartz and dolomite occasionally very fine idiotopic crystalline cements, traces dark brown to black bitumen and plant fragments, tight, no shows.

Note: 69 m – start gaining water at 3 m^3/h rate at 1000 kg/m^3 density – water flow controlled at 1050 kg/m^3 density.

76-91 m Sandstone 99%: light grey interbedded with greenish-grey, translucent to transparent and frosted quartz 95%, white and yellowish feldspar 2% with pink feldspar traces, lithic grains 2%, traces of mafic rocks, traces glauconite, occasionally pyrite nodules, lower medium to lower coarse interbedded with upper medium to very coarse and gravel size (micro-conglomerate), coarsening downward sequences, angular to subrounded, poor to medium sorted, grain supported fabric with abundant clear quartz overgrowth infilling pores, quartz cement and matrix 96% replacement dolomite 3% and secondary calcite relicts cement traces, kaolinite 1-2%, scattered black bitumen thin layers, intercrystalline and pinpoint porosity 10-12%, no shows, scattered **Siltstone <1%:** light to medium grey with traces dark brown to black bitumen and plant fragments, tight, no shows.

91-103 m Sandstone 85-90%: light grey to greenish-grey, translucent to transparent and frosted quartz 95%, white and yellowish feldspar 2% with pink feldspar 1%, lithic grains 2%, traces of mafic rocks, traces jasper, glauconite traces and locally abundant, occasionally pyrite nodules, lower medium to lower coarse and locally gravel rounded quartz, angular to subrounded and rounded, poor to medium sorted, quartz overgrowth infilling pores, quartz cement and matrix 95% and replacement dolomite and secondary calcite relicts cement 5%, kaolinite 1-2%, intercrystalline and rare pinpoint porosity, no shows **Siltstone 10-15%:** light to medium grey, lower very fine quartz 80% with argillaceous matrix 20%, traces dark brown to black bitumen and plant fragments, grading to siltitic shale, tight no shows.

103-118 m Sandstone 100%: light grey to greenish-grey, translucent to transparent and frosted quartz 95%, white and yellowish feldspar 2% with pink feldspar 1%, lithic grains 2%, traces of mafic rocks, glauconite traces and locally abundant, occasionally pyrite nodules, lower medium to lower coarse and locally gravel rounded quartz, angular to subrounded and rounded, poor to medium sorted, quartz overgrowth infilling pores, quartz cement and matrix 85% and replacement dolomite and secondary calcite relicts cement 15%, kaolinite 1-2%, intercrystalline and rare pinpoint porosity, no shows.

118-119 m Shale 100%: medium grey blocky medium indurated slightly siltitic and traces dolomitic.

119-129 m Sandstone 100%: light grey to greenish-grey, translucent to transparent and frosted quartz 90%, white and yellowish feldspar 3% with pink feldspar 1%, lithic grains 3%, mafic rocks 2%, glauconite traces, traces jasper, occasionally pyrite nodules, lower medium to lower coarse and locally gravel rounded quartz and pebble size fragments in micro-conglomerate cm layers, angular to

subrounded and rounded, poor to medium sorted, quartz overgrowth infilling pores, quartz cement and matrix 85% and replacement dolomite and locally abundant calcite cement 20%, kaolinite traces, intercrystalline and rare pinpoint porosity 8-12%, no shows.

York River Fm 129.0 mMD

129-145 m Argillaceous Siltstone 60%: medium grey, lower very fine quartz 85% with argillaceous matrix 15%, traces dark brown to black bitumen and plant fragments, grading to siltitic shale, tight no show, **Shale 5%:** medium grey blocky medium indurated slightly siltitic and traces dolomitic, **Sandstone 30-45%:** light grey to greenish-grey, translucent to transparent and frosted quartz 93%, white and yellowish feldspar 3%, lithic grains 2%, mafic rocks 2%, glauconite traces, traces jasper, occasionally pyrite nodules, lower medium to lower coarse and locally gravel rounded quartz and pebble size fragments in micro-conglomerate cm layers, angular to subrounded and rounded, poor to medium sorted, quartz overgrowth infilling pores, quartz cement and matrix 85% and replacement dolomite and locally abundant calcite cement 20%, kaolinite traces, intercrystalline porosity 5-8%, no shows.

145-149 m Shale 100%: greenish-grey, medium grey, light to medium brown, slightly siltitic in part, blocky, non to locally pyrite, chips with fracture slickenside planes, medium indurated.

149-159 m Sandstone 60%: greenish-grey, translucent and frosted quartz 82%, white and yellowish feldspar 4-8%, lithic grains 8%, mafic rocks 3%, traces jasper, occasionally pyrite nodules, lower fine to lower medium with locally upper coarse rounded quartz and gravel size fragments in micro-conglomerate, slightly argillaceous in part, angular to subrounded, well sorted, clear locally hip-idiomorphic quartz overgrowth infilling pores, quartz cement and matrix 45-90% and replacement dolomite and locally calcite cement from traces to 55%, amber and dark brown and black scattered bitumen infilling pores, tight, no shows, grading to **Argillaceous Siltstone 25%:** medium greenish-grey, lower very fine quartz 85% with argillaceous matrix 15%, traces dark brown to black bitumen and plant fragments, grading to siltitic shale, tight no show, **Shale 15%:** greenish-grey, medium grey, dark grey-brown, slightly siltitic in part, blocky, non to locally pyrite, chips with fracture slickenside planes, medium indurated.

159-176 m Sandstone 95%: greenish-grey, abundant clear translucent and frosted quartz 80%, white and yellowish feldspar 4-8%, lithic grains 8%, mafic rocks 3%, traces jasper, occasionally pyrite nodules, lower fine to lower medium with locally lower coarse rounded quartz in poor sorted sequences, slightly argillaceous in part, angular to subrounded, well to poor sorted, clear locally hip-idiomorphic quartz overgrowth infilling pores, quartz cement and matrix 90% and replacement dolomite 7% and locally calcite cement from traces to 3%, scattered bitumen infilling pores, tight, no shows, **Shale 5%:** greenish-grey, medium grey, dark grey-brown, slightly siltitic in part, blocky, non to locally pyrite, chips with fracture slickenside planes, medium indurated.

176-195 m Sandstone 90-97%: greenish-grey and light grey, abundant clear translucent and frosted quartz 83%, white and yellowish and occasionally pink feldspar 5%, lithic grains 6%, mafic rocks 3%, traces jasper, occasionally pyrite nodules, lower fine to lower medium coarsening toward bottom sequence from lower medium to upper coarse, angular to subrounded and rounded, well to medium

sorted, quartz overgrowth partially closing pores, quartz cement and matrix 80% and replacement dolomite 10-15% and locally calcite cement 5-15%, tight, no shows, **Shale 3-10%:** greenish-grey, medium to dark grey, dark grey-brown, slightly siltitic in part, blocky, non to locally pyrite, medium indurated.

195-201 m Sandstone 95%: greenish-grey and light grey, abundant clear translucent and frosted quartz 83%, white and yellowish and occasionally pink feldspar 5%, lithic grains 6%, mafic rocks 3%, traces jasper, occasionally pyrite nodules, lower fine to lower medium coarsening toward bottom sequence from lower medium to upper coarse, angular to subrounded and rounded, well to medium sorted, quartz overgrowth partially closing pores, quartz cement and matrix 80% and replacement dolomite 10-15% and locally calcite cement 5-15%, tight, no shows, **Shale 5%:** greenish-grey, medium to dark grey, dark grey-brown, slightly siltitic in part, blocky, non to locally pyrite, medium indurated.

201-213 m Sandstone 100%: light grey to rare greenish-grey, translucent to transparent and frosted quartz 90%, white yellowish feldspar 4% with pink feldspar 1%, lithic grains 2%, mafic rocks 1%, glauconite traces, occasionally pyrite nodules, lower medium to lower coarse, angular to subangular and locally subrounded, medium sorted, quartz overgrowth infilling pores, quartz calcite and dolomite cement, kaolinite traces, intercrystalline and rare pinpoint porosity 8-12%, no shows.

213-222 m Sandstone 94%: greenish-grey, translucent frosted and locally clear quartz 83%, white and yellowish and occasionally pink feldspar 10%, lithic grains 8%, mafic rocks 4-5%, glauconite <1%, traces jasper, occasionally pyrite nodules, lower to upper medium and 5% lower coarse, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix 85% and replacement dolomite 10% and locally calcite cement 4% and traces kaolinite, inferred 3-5% interparticulate porosity, no shows, **Shale 6%:** greenish-grey, medium to dark grey, dark grey-brown, slightly siltitic in part, blocky, non to locally pyrite, medium indurated.

222-228 m Sandstone 80-85%: greenish-grey, translucent frosted and locally clear quartz 83%, white and yellowish and occasionally pink feldspar 10%, lithic grains 8%, mafic rocks 4-5%, glauconite <1%, traces jasper, occasionally pyrite nodules, lower to upper medium and 5% lower coarse, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix 85% and replacement dolomite 10% and locally calcite cement 4% and traces kaolinite, inferred 3-5% interparticulate porosity, amber to dark brown relatively abundant bitumen, no other shows, **Shale 5-10%:** greenish-grey, medium to dark grey, dark grey-brown, slightly siltitic in part, blocky, non to locally pyrite, medium indurated, grading to **Argillaceous Siltstone 10%.**

228-237 m Sandstone 95%: greenish-grey, translucent frosted and locally clear quartz 83%, white and yellowish and occasionally pink feldspar 10%, lithic grains 8%, mafic rocks 4-5%, glauconite <1%, traces jasper, occasionally pyrite nodules, lower to upper medium and 5% lower coarse, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix 85% and replacement dolomite 10% and locally calcite cement 4% and traces kaolinite, inferred 3-5% interparticulate porosity, amber to dark brown scattered bitumen, no other shows, **Shale 3%:** greenish-grey, medium to dark grey, dark grey-brown, slightly siltitic in part, blocky, non to locally pyrite, medium indurated, grading to **Argillaceous Siltstone 2%.**

237-265 m Siltitic Shale 45%: greenish-grey, medium to dark grey, dark grey-brown, slightly to very siltitic and grading to argillaceous siltstone part, blocky, locally pyrite, non to very slightly dolomitic when siltitic, medium indurated, grading to **Argillaceous Siltstone 50%:** lower very fine quartz with quartz cement and thin layers with dolomitic cement, and very locally thin fractures with calcite and dolomite infill, scattered bitumen, tight, no shows, **Sandstone 5%:** greenish-grey, quartz 75%, white and yellowish and occasionally pink feldspar 12%, lithic grains 10%, mafic rocks 4%, glauconite traces, occasionally pyrite nodules, upper very fine to lower medium, angular to subrounded and rare rounded, well to medium sorted, quartz cement and matrix and replacement dolomite 0-5%, local amber to dark brown scattered bitumen, no shows.

265-279 m Argillaceous Siltstone 63%: medium grey, lower very fine quartz with quartz cement and thin layers with dolomitic cement, and very locally thin fractures with calcite and dolomite infill, scattered bitumen, tight, no shows, grading to **Siltitic Shale 35%:** greenish-grey, medium to dark grey, dark grey-brown, slightly to very siltitic and grading to argillaceous siltstone part, blocky, locally pyrite, non to very slightly dolomitic when siltitic, medium indurated, **Sandstone 1-2%:** greenish-grey, quartz 75%, white and yellowish and occasionally pink feldspar 12%, lithic grains 10%, mafic rocks 4%, glauconite traces, occasionally pyrite nodules, upper very fine to lower medium, angular to subrounded and rare rounded, well to medium sorted, quartz cement and matrix and replacement dolomite 0-5%, local amber to dark brown scattered bitumen, no shows.

279-299 m Argillaceous Siltstone 70%: medium grey, lower very fine quartz with quartz cement and thin layers with dolomitic cement, very fine to fine muscovite flacks traces, and very locally thin fractures with calcite and dolomite infill, scattered bitumen, tight, no shows, grading to **Siltitic Shale 25%:** greenish-grey, secondary medium to dark grey, dark grey-brown, slightly to very siltitic and grading to argillaceous siltstone part, blocky, locally pyrite, non to very slightly dolomitic when siltitic, medium indurated, **Sandstone 5%:** greenish-grey, quartz 75%, white and yellowish and pink feldspar 12%, lithic grains 10%, mafic rocks 4%, glauconite traces, occasionally pyrite nodules, upper very fine to lower medium, angular to subrounded and rare rounded, well to medium sorted, quartz cement and matrix and replacement dolomite 0-5%, local amber to dark brown scattered bitumen, no shows.

299-318 m Argillaceous Siltstone 80%: medium grey, lower very fine quartz with quartz cement and locally dolomitic cement, very fine to fine muscovite flacks traces, scattered bitumen, tight, no shows, grading to **Siltitic Shale 15%:** greenish-grey, secondary medium to dark grey, dark grey-brown, slightly to very siltitic and grading to argillaceous siltstone part, blocky, locally pyrite, non dolomitic, medium indurated, **Sandstone 5%:** greenish-grey, quartz 80%, white and yellowish and pink feldspar 6%, lithic grains 10%, mafic rocks 4%, glauconite traces, occasionally pyrite nodules, upper very fine to lower medium, angular to subrounded and rare rounded, well to medium sorted, quartz cement and matrix and replacement dolomite 0-5%, local amber to dark brown scattered bitumen, no shows.

318-330 m Sandstone 55%: greenish-grey, quartz 82%, white and yellowish and rare pink feldspar 5%, lithic grains 10%, mafic rocks 3%, occasionally pyrite nodules, very fine to fine muscovite flacks traces, upper very fine to lower medium, angular to subrounded and rare rounded, well to medium sorted, quartz cement and matrix and replacement dolomite 0-5%, local amber to dark brown scattered bitumen, no shows **Argillaceous Siltstone 35%:** medium grey, lower very fine quartz with quartz cement and locally dolomitic cement, very fine to fine muscovite flacks traces, scattered bitumen, tight,

no shows, grading to **Siltitic Shale 10%:** greenish-grey, secondary medium to dark grey, dark grey-brown, slightly to very siltitic and grading to argillaceous siltstone part, blocky, locally pyrite, non dolomitic, medium indurated.

330-340 m Sandstone 95%: greenish-grey, translucent frosted and locally clear quartz 83%, white and yellowish and pink feldspar 10%, lithic grains 8%, mafic rocks 4-5%, glauconite <1%, traces jasper, occasionally pyrite nodules, fine to medium size muscovite flacks traces, lower to upper medium and 3% lower coarse, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix 85% and replacement dolomite 10% and locally calcite cement 4% and traces kaolinite, inferred 3-5% interparticulate porosity, amber to dark brown scattered bitumen, no other shows, **Shale 3%:** greenish-grey, medium to dark grey, dark grey-brown, slightly siltitic in part, blocky, non to locally pyrite, medium indurated, grading to **Argillaceous Siltstone 2%:** medium grey, lower very fine quartz with quartz cement and locally dolomitic cement, very fine to fine muscovite flacks traces, scattered bitumen, tight, no shows.

330-340 m Siltitic Shale 65%: dark grey-brown, greenish-grey, secondary medium to dark grey, slightly to very siltitic and grading to argillaceous siltstone part, blocky, locally pyrite, non dolomitic, medium indurated, **Argillaceous Siltstone 25%:** medium grey, lower very fine quartz with quartz cement and locally dolomitic cement, very fine to fine muscovite flacks traces, scattered bitumen, tight, no shows **Sandstone 10%:** greenish-grey, quartz 82%, white and yellowish and rare pink feldspar 5%, lithic grains 10%, mafic rocks 3%, occasionally pyrite nodules, very fine to fine muscovite flacks traces, upper very fine to lower medium, angular to subrounded and rare rounded, well to medium sorted, quartz cement and matrix and replacement dolomite 0-5%, local amber to dark brown scattered bitumen, no shows.

340-354 m Siltitic Shale 60%: dark grey-brown, greenish-grey, secondary medium to dark grey, slightly to very siltitic and grading to argillaceous siltstone part, blocky, locally pyrite, non dolomitic, medium indurated, chips with fracture slickenside planes in 351-354m samples, **Argillaceous Siltstone 25%:** medium grey, lower very fine quartz with quartz cement and locally dolomitic cement, very fine to fine muscovite flacks traces, scattered bitumen, tight, no shows **Sandstone 15%:** greenish-grey, quartz 82%, white and yellowish and rare pink feldspar 5%, lithic grains 10%, mafic rocks 3%, occasionally pyrite nodules, very fine to fine muscovite flacks traces, upper very fine to lower medium, angular to subrounded and rare rounded, well to medium sorted, quartz cement and matrix and replacement dolomite 0-5%, local amber to dark brown scattered bitumen, no shows.

354-360 m Sandstone 95%: greenish-grey, translucent frosted and locally clear quartz 83%, white and yellowish and pink feldspar 10%, lithic grains 8%, mafic rocks 4-5%, glauconite <1%, traces jasper, occasionally pyrite nodules, fine to medium size muscovite and scattered biotite flacks, lower to upper medium and 3% lower coarse, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix 85% and replacement dolomite 10% and locally calcite cement 4% and traces kaolinite, inferred 3-5% interparticulate porosity, amber to dark brown scattered bitumen, fractures infilled with coarse calcite and secondary dolomite and inferred porosity, instant weak white cut, pale yellow fluorescence, with **Shale 3%:** greenish-grey, medium to dark grey, chips with fracture slickenside planes and **Argillaceous Siltstone 2%:** as above.

360-374 m Argillaceous Siltstone 40%: medium grey, lower very fine quartz with quartz cement and locally dolomitic cement, very fine to fine muscovite flacks traces, scattered bitumen, tight, no shows **Sandstone 55%:** greenish-grey, quartz 82%, white and yellowish and rare pink feldspar 5%, lithic grains 10%, mafic rocks 3%, occasionally pyrite nodules, very fine to fine muscovite flacks traces, upper very fine to lower medium, angular to subrounded and rare rounded, well to medium sorted, quartz cement and matrix and replacement dolomite 5%, local amber to dark brown scattered bitumen, instant fainted white cut, pale yellow fluorescence in 369m sample, **Siltitic Shale 10%:** dark grey-brown, greenish-grey, secondary medium to dark grey, slightly to very siltitic and grading to argillaceous siltstone part, blocky, locally pyrite, non dolomitic, medium indurated, scattered chips with fracture slickenside planes.

374-384 m Argillaceous Siltstone 75%: light to medium grey, lower very fine quartz with quartz cement and locally dolomitic cement, very fine to fine muscovite flacks traces, scattered bitumen, **Siltitic Shale 20%:** dark grey-brown, greenish-grey, secondary medium to dark grey, slightly to very siltitic and grading to argillaceous siltstone part, blocky, locally pyrite, non dolomitic, medium indurated, **Sandstone 5%:** greenish-grey, quartz 80%, white and yellowish and rare pink feldspar 3%, lithic grains 8%, mafic rocks 2%, occasionally pyrite nodules, very fine to fine muscovite flacks traces, upper very fine to lower medium, angular to subrounded and rare rounded, well to medium sorted, quartz cement and matrix and replacement dolomite 5%, local amber to dark brown scattered bitumen, no shows.

374-398 m Argillaceous Siltstone 80%: light to medium grey, lower very fine quartz with quartz cement and secondary localized dolomitic cement, very fine to fine muscovite flacks, scattered bitumen, **Siltitic Shale 18%:** dark grey-brown, greenish-grey, secondary medium to dark grey, slightly to very siltitic and grading to argillaceous siltstone part, blocky, locally pyrite, non dolomitic, medium indurated, **Sandstone 2%:** greenish-grey, quartz 80%, white and yellowish and rare pink feldspar 3%, lithic grains 8%, mafic rocks 2%, occasionally pyrite nodules, very fine to fine muscovite flacks traces, upper very fine to lower medium, angular to subrounded and rare rounded, well to medium sorted, quartz cement and matrix and replacement dolomite 5%, local amber to dark brown scattered bitumen, no shows.

398-405 m Siltstone 80%: light to medium grey and brownish grey, lower very fine quartz with quartz (when light grey) and locally argillaceous cement, very fine to fine muscovite flacks, scattered bitumen, grading to **Siltitic Shale 20%:** medium grey-brown, medium grey, secondary dark grey, slightly to very siltitic and grading to argillaceous siltstone, blocky, locally pyrite, non dolomitic, medium indurated.

405-417 m Sandstone 75%: greenish-grey, translucent frosted and locally clear quartz 83%, white and yellowish and pink feldspar 10%, lithic grains 8%, mafic rocks 4-5%, glauconite <1%, occasionally pyrite nodules, fine to medium size muscovite and scattered biotite flacks, lower fine to upper medium, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix 95% and replacement dolomite 5%, tight, amber to dark brown abundant bitumen thin lenses, slow fainted white cut, weak straw yellow fluorescence **Siltitic Shale 10%:** medium grey-brown, medium grey, secondary dark grey, slightly to very siltitic and grading to argillaceous siltstone, blocky, locally pyrite, non dolomitic, medium indurated, **Siltstone 15%:** light to medium grey and brownish grey, lower very fine quartz with quartz (when light grey) and locally argillaceous cement, very fine to fine muscovite flacks, scattered bitumen.

417-448 m Siltstone 80%: light grey when clean to medium grey and brownish grey when argillaceous, lower very fine quartz, angular to subrounded, well sorted, quartz grading to argillaceous cement, slightly to abundant dolomitic cement, very fine to fine muscovite flacks, occasionally bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, slow fainted white cut, weak straw yellow fluorescence, grading to **Siltitic Shale 15%:** medium grey-brown, medium grey, secondary brown, slightly to very siltitic and grading to argillaceous siltstone, blocky, locally pyrite, non dolomitic, medium indurated, scattered chips with fracture slickenside planes, with thin **Sandstone 5%:** greenish-grey, translucent frosted and locally clear quartz 85%, white and yellowish and very rare pink feldspar 8%, lithic grains 8%, mafic rocks 3%, glauconite traces, occasionally pyrite nodules, fine to medium size muscovite flakes, lower to upper fine, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix and scattered replacement dolomite, amber to dark brown abundant bitumen thin lenses, slow fainted white cut, weak straw yellow fluorescence.

461-468 m Siltitic Shale 50%: medium greenish-grey and medium grey, secondary brown, slightly to very siltitic and grading to argillaceous siltstone, blocky, locally pyrite, non dolomitic, medium indurated **Siltstone 50%:** light grey when clean to medium grey and brownish grey when argillaceous, lower very fine quartz, angular to subrounded, well sorted, quartz grading to argillaceous cement, very fine to fine muscovite flacks, occasionally bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, slow fainted white cut, weak straw yellow fluorescence.

468-481 m Siltstone 65%: light grey when clean to medium grey and brownish grey when argillaceous, lower very fine quartz, angular to subrounded, well sorted, quartz grading to argillaceous cement, slightly to abundant dolomitic cement, very fine to fine muscovite flacks, occasionally bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, slow fainted white cut, weak straw yellow fluorescence, grading to **Siltitic Shale 33%:** medium greenish-grey and medium grey, secondary brown, slightly to very siltitic and grading to argillaceous siltstone, blocky, locally pyrite, non dolomitic, medium indurated, **Sandstone 2%:** stringers as above.

481-504 m Sandstone 98%: greenish-grey, translucent frosted and locally clear quartz 75%, white and yellowish and occasionally pink feldspar 12%, lithic grains 7%, mafic rocks 4%, glauconite <1%, traces jasper, occasionally pyrite nodules, fine to medium size muscovite flacks, upper fine to upper medium on top coarsening toward bottom to upper very coarse and grading to micro-conglomerate – conglomerate with quartz, mafic rock jasper elements, angular to subrounded and rounded in coarse grains, well to poor sorted, quartz overgrowth partially infill pores, quartz cement and matrix 85% and replacement dolomite 10% and locally calcite cement 4% and traces kaolinite, inferred 8-12% interparticulate porosity, amber to dark brown scattered bitumen, instant moderate white cut, straw yellow fluorescence (most pregnant in 498m sample), greenish-grey **Shale** and medium grey **Argillaceous Siltstone** thin interbeds in upper section.

504-522 m Siltstone 65%: light grey when clean to medium grey and brownish grey when argillaceous, lower very fine quartz, angular to subrounded, well sorted, quartz grading to argillaceous cement, slightly to abundant dolomitic cement, very fine to fine muscovite flacks, occasionally bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, slow fainted white cut, weak straw yellow fluorescence, grading to **Siltitic Shale 10%:** medium greenish-grey and

medium grey, secondary brown, slightly to very siltitic and grading to argillaceous siltstone, blocky, locally pyrite, non dolomitic, medium indurated, **Sandstone 25%:** greenish-grey, translucent frosted and locally clear quartz 85%, white and yellowish and very rare pink feldspar 8%, lithic grains 8%, mafic rocks 3%, glauconite traces, occasionally pyrite nodules, fine to medium size muscovite flakes, lower to upper fine, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix and scattered replacement dolomite, tight.

522-543 m Sandstone 90%: greenish-grey, translucent frosted and locally clear quartz 75%, white and yellowish and occasionally pink feldspar 12%, lithic grains 7%, mafic rocks 4%, glauconite <1%, traces jasper, occasionally pyrite nodules, fine to medium size muscovite flacks, lower fine to lower medium on top coarsening toward bottom to upper very coarse and grading to micro-conglomerate, angular to subrounded and rounded in coarse grains, well to poor sorted, quartz overgrowth partially infill pores, quartz cement and matrix 85% and replacement dolomite 10% and locally calcite cement 4% and traces kaolinite, inferred 8-12% interparticulate porosity, amber to dark brown scattered bitumen, instant weak white cut, straw yellow fluorescence (most pregnant on bottom), greenish-grey **Shale** and medium grey **Argillaceous Siltstone** thin interbeds in upper section.

543-565 m Siltstone 80%: light greenish-grey medium grey and brownish grey, lower very fine quartz, angular to subrounded, well sorted, quartz grading to argillaceous cement, slightly to abundant dolomitic cement, very fine to fine muscovite flacks, abundant bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, slow fainted white cut, weak straw yellow fluorescence, grading to **Siltitic Shale 15%:** medium grey-brown, medium grey, secondary brown, slightly to very siltitic and grading to argillaceous siltstone, blocky, locally pyrite, non dolomitic, medium indurated, with thin **Sandstone 5%:** greenish-grey, translucent frosted and locally clear quartz 85%, white and yellowish and very rare pink feldspar 8%, lithic grains 8%, mafic rocks 3%, glauconite traces, occasionally pyrite nodules, fine to medium size muscovite flakes, lower to upper fine, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix and scattered replacement dolomite, amber to dark brown abundant bitumen thin lenses, no shows.

565-575 m Sandstone 90%: greenish-grey, translucent frosted quartz 74%, white and yellowish and very rare pink feldspar 12%, lithic grains 10%, mafic rocks 3%, traces jasper, occasionally pyrite nodules, fine to medium size rare muscovite flacks, upper fine to upper medium coarsening toward bottom, slightly argillaceous on top, angular to subrounded,, well to moderate sorted, quartz overgrowth partially infill pores, quartz cement and matrix 50% and replacement dolomite and locally abundant calcite cement in 570-580 m interval, inferred 3-5% interparticulate porosity, locally amber to dark brown scattered bitumen, very fainted white cut, straw yellow fluorescence, crossed by thin fractures infilled with medium crystalline calcite, **Shale 2%:** medium grey-brown, medium grey, secondary brown, slightly to very siltitic and grading to **Argillaceous Siltstone 8%:** light greenish-grey medium grey and brownish grey.

575-595 m Sandstone 96%: greenish-grey, translucent frosted quartz 74%, white and yellowish and very rare pink feldspar 10%, lithic grains 8%, mafic rocks 5%, traces jasper, traces glauconite, scattered pyrite nodules, fine to medium size rare muscovite flacks, upper fine to upper medium, slightly argillaceous on top, angular to subrounded,, well to moderate sorted, quartz overgrowth

partially infill pores, quartz cement and matrix 50% and replacement dolomite and rare calcite relict cement, inferred 5% interparticulate porosity, locally amber to dark brown scattered bitumen, very fainted white cut, straw yellow fluorescence, **Shale 2%:** medium grey-brown, medium grey, secondary brown, slightly to very siltitic and grading to **Argillaceous Siltstone 2%:** light greenish-grey medium grey and brownish grey.

595-616 m Sandstone 85%: greenish-grey, translucent frosted quartz 74%, white and yellowish and very rare pink feldspar 10%, lithic grains 8%, mafic rocks 5%, traces jasper, traces glauconite, scattered pyrite nodules, fine to medium size rare muscovite flacks, upper fine to upper medium, slightly argillaceous on top, angular to subrounded,, well to moderate sorted, quartz overgrowth partially infill pores, quartz cement and matrix 50% and replacement dolomite and rare calcite relict cement, inferred 5% interparticulate porosity, locally amber to dark brown scattered bitumen, very fainted white cut, straw yellow fluorescence, **Shale 3%:** medium grey-brown, medium grey, secondary brown, slightly to very siltitic and grading to **Argillaceous Siltstone 12%:** light greenish-grey medium grey and brownish grey.

616-631 m Sandstone 100%: greenish-grey, translucent frosted quartz 72%, white flesh yellowish and very rare pink feldspar 12%, lithic grains 8%, mafic rocks 5%, traces jasper, traces glauconite, scattered pyrite nodules, lower to medium size rare muscovite flacks, lower to upper medium, angular to subrounded,, well sorted, quartz overgrowth partially infill pores, quartz cement and matrix and replacement dolomite and occasionally abundant calcite relict cement (627 m sample), locally amber to dark brown scattered bitumen, inferred 5% interparticulate porosity, very fainted white cut, straw yellow fluorescence.

631-642.5 m Siltstone 85%: light greenish-grey medium grey and brownish grey, lower very fine quartz, angular to subrounded, well sorted, quartz grading to argillaceous cement, slightly to abundant dolomitic cement, very fine to fine muscovite flacks, abundant bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, slow fainted white cut, weak straw yellow fluorescence, **Sandstone 10%:** greenish-grey, translucent frosted quartz 72%, white flesh yellowish and very rare pink feldspar 12%, lithic grains 8%, mafic rocks 5%, traces jasper, traces glauconite, scattered pyrite nodules, lower to medium size rare muscovite flacks, lower to upper medium, angular to subrounded,, well sorted, quartz overgrowth partially infill pores, quartz cement and matrix and replacement dolomite and occasionally calcite relict cement, locally amber to dark brown scattered bitumen, inferred 5% interparticulate porosity, very fainted white cut, straw yellow fluorescence, **Shale 3%:** medium grey-brown, medium grey, secondary brown, slightly to very siltitic, chips with fracture slickenside planes on top.

642.5-669 m Sandstone 97%: light grey to very light greenish-grey, translucent to transparent quartz 88%, white and flesh-yellowish feldspar 2%, lithic grains 7%, traces of mafic rocks, glauconite traces to 1%, traces jasper grains, upper fine to upper medium, angular to subangular, well sorted, grain supported fabric with abundant quartz overgrowth infilling pores, quartz cement 60-75% replacement dolomite cement 25-40%, kaolinite 1-2%, scattered black bitumen in pores, low to medium relief, tight to occasionally inferred intercrystalline porosity 4-6%, no show **Dolomitic Veins and Healed Fractures 2-3%:** very coarse crystalline limpid to translucent rhombic dolomite, polymodal size, euhedral shape, idiotopic texture, with no or drusy cement, no matrix, tight.

669-683 m Sandstone 98%: light grey to very light greenish-grey, translucent to transparent quartz 90%, white and flesh-yellowish feldspar 3%, lithic grains 5%, traces of mafic rocks, glauconite traces to 1%, traces jasper grains, upper fine to upper medium, angular to subangular, well sorted, grain supported fabric with abundant quartz overgrowth infilling pores, quartz cement 60-75% replacement dolomite cement 25-40%, kaolinite 1-2%, scattered to abundant black bitumen in pores, low to medium relief, tight to occasionally inferred intercrystalline porosity 4-6%, no show **Dolomitic Veins and Healed Fractures 2%:** very coarse crystalline limpid to translucent rhombic dolomite, polymodal size, euhedral shape, idiotopic texture, with no or drusy cement, no matrix, tight.

683-703 m Sandstone 100%: light grey to very light greenish-grey, translucent to transparent quartz 90%, white and flesh-yellowish feldspar 3%, lithic grains 5%, traces of mafic rocks, glauconite traces to 1%, traces jasper grains, upper fine to upper medium, angular to subangular, well sorted, grain supported fabric with abundant quartz overgrowth infilling pores, quartz cement 60-75% replacement dolomite cement 25-40%, kaolinite 1-2%, scattered to abundant black bitumen in pores, low to medium relief, tight to occasionally inferred intercrystalline porosity 4-6%, no show, scattered **Dolomitic Veins:** very coarse crystalline translucent dolomite, polymodal size, euhedral shape, xenotopic texture, with drusy cement, no matrix, tight.

703-712 m Siltstone 85%: light greenish-grey medium grey and brownish grey, lower very fine quartz, angular to subrounded, well sorted, quartz grading to argillaceous cement, slightly to abundant dolomitic cement, scattered amber to dark brown bitumen, **Sandstone 15%:** light grey to very light greenish-grey, translucent to transparent quartz 90%, white and flesh-yellowish feldspar 3%, lithic grains 5%, traces of mafic rocks, glauconite traces to 1%, traces jasper grains, upper fine to upper medium, angular to subangular, well sorted, grain supported fabric with abundant quartz overgrowth infilling pores, quartz cement 60-75% replacement dolomite cement 25-40%, kaolinite 1-2%, scattered to abundant black bitumen in pores, low to medium relief, tight to occasionally inferred intercrystalline porosity 4-6%, no show, scattered **Dolomitic Veins:** very coarse crystalline translucent dolomite, polymodal size, euhedral shape, xenotopic texture, with drusy cement, no matrix, tight.

712-719 m Siltstone 100%: light grey, lower very fine quartz, angular to subrounded, well sorted, quartz and scattered argillaceous cement, slightly to abundant dolomitic cement, abundant bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses.

719-743 m Sandstone 90%: greenish-grey, translucent frosted and locally clear quartz 76%, white and yellowish and very rare pink feldspar 8%, lithic grains 12%, mafic rocks 3%, glauconite traces, occasionally pyrite nodules, fine to medium size muscovite flakes, lower to upper fine prograding toward bottom to lower medium and occasionally upper medium, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix and scattered replacement dolomite, amber to dark brown abundant bitumen thin lenses, slow fainted white cut, weak straw yellow fluorescence **Siltstone 10%:** light grey when clean to medium grey and brownish grey when argillaceous, lower very fine quartz, angular to subrounded, well sorted, quartz grading to argillaceous cement, slightly to abundant dolomitic cement, very fine to fine muscovite flacks, occasionally bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, slow fainted white cut, weak straw yellow fluorescence.

743-759 m Sandstone 90%: greenish-grey, translucent frosted and locally clear quartz 76%, white and yellowish and very rare pink feldspar 8%, lithic grains 12%, mafic rocks 3%, glauconite traces, occasionally pyrite nodules, fine to medium size muscovite flakes, lower to upper fine prograding toward bottom to lower medium and occasionally upper medium, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix and scattered replacement dolomite, amber to dark brown abundant bitumen thin lenses, slow fainted white cut, weak straw yellow fluorescence **Siltstone 10%:** light grey when clean to medium grey and brownish grey when argillaceous, lower very fine quartz, angular to subrounded, well sorted, quartz grading to argillaceous cement, slightly to abundant dolomitic cement, very fine to fine muscovite flacks, occasionally bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, slow fainted white cut, weak straw yellow fluorescence.

759-765 m Siltstone 100%: light to medium grey, argillaceous, lower very fine quartz, angular to subrounded, well sorted, quartz grading to argillaceous cement, slightly to abundant dolomitic cement, very fine to fine muscovite flacks, scattered bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses.

765-789 m Argillaceous Sandstone 50%: light grey to very light greenish-grey, translucent to transparent quartz 90%, white feldspar 2%, lithic grains 3%, lower to upper fine, angular to subangular, well sorted, grain supported fabric with abundant quartz overgrowth infilling pores, quartz cement 80% replacement dolomite cement 20%, argillaceous matrix, scattered dark brown amber and black bitumen in pores, low to medium relief, tight, amber to dark brown abundant bitumen thin lenses, instant medium fainted white cut, weak straw yellow fluorescence, **Argillaceous Siltstone 50%:** medium grey and medium brownish-grey, lower very fine quartz, angular to subrounded, well sorted, quartz and argillaceous cement, slightly dolomitic in part, very fine to fine muscovite flacks, grading to dark grey siltitic shale, scattered bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, Fracture zone infilled with large crystalline calcite in 780-785 m.

789-798 m Siltitic Shale 60%: medium to dark brownish-grey, very siltitic to locally slightly siltitic, abundant organic material in part, blocky , medium indurated, scattered slickenside surfaces, **Argillaceous Siltstone 40%:** medium grey and medium brownish-grey, lower very fine quartz, angular to subrounded, well sorted, quartz and argillaceous cement, slightly dolomitic in part, rare very fine to fine muscovite flacks, grading to dark grey siltitic shale, scattered bitumen and organic matter hair thin interbedded layers and amber to dark brown bitumen thin lenses, grading locally to light grey **Sandstone.**

798-823 m Argillaceous Siltstone 80%: light to medium grey, lower very fine quartz, angular to subrounded, well sorted, quartz and argillaceous cement, slightly dolomitic in part, rare very fine to fine muscovite flacks, scattered bitumen and organic matter hair thin interbedded layers and amber to dark brown bitumen thin lenses, occasionally thin fractures infilled with dolomite, instant fainted white cut, weak straw yellow fluorescence, **Siltitic Shale 20%:** medium to dark brownish-grey, very siltitic to locally slightly siltitic, abundant organic material in part, blocky , medium indurated, scattered slickenside surfaces.

823-843 m Sandstone 85-90%: medium grey upper and greenish-grey lower, argillaceous on top to very slightly argillaceous on bottom, translucent and frosted quartz 76%, white and yellowish feldspar 8%, lithic grains 15%, mafic rocks 2%, occasionally pyrite nodules, fine muscovite and occasionally biotite flakes, lower to upper fine prograding toward bottom to lower medium and occasionally upper medium, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix and scattered replacement dolomite, amber to dark brown scattered bitumen in pores, slow fainted white cut, weak straw yellow fluorescence **Argillaceous Siltstone 10-15%:** medium grey and medium brownish-grey, lower very fine quartz, angular to subrounded, well sorted, quartz and argillaceous cement, slightly dolomitic in part, locally very fine to fine muscovite flacks, grading to dark grey siltitic shale, rare bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, rare fracture zone infilled with large crystalline calcite, **Siltitic Shale 2-3%:** medium to dark brownish-grey, very siltitic to locally slightly siltitic, abundant organic material in part, blocky , medium indurated, scattered slickenside surfaces.

843-851 m Argillaceous Siltstone 80%: medium grey and medium brownish-grey, lower very fine quartz, angular to subrounded, well sorted, quartz and argillaceous cement, slightly dolomitic in part, locally very fine to fine muscovite flacks, grading to dark grey siltitic shale, rare bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, rare fracture zone infilled with large crystalline calcite, **Siltitic Shale 15%:** medium to dark brownish-grey, very siltitic to locally slightly siltitic, abundant organic material in part, blocky, medium indurated, scattered slickenside surfaces, **Sandstone 5%:** medium grey upper and greenish-grey lower, argillaceous, , amber to dark brown scattered bitumen in pores, slow fainted white cut, weak straw yellow fluorescence.

851-861 m Sandstone 90%: medium grey upper and greenish-grey lower, argillaceous on top to very slightly argillaceous on bottom, translucent and frosted quartz 76%, white and yellowish feldspar 8%, lithic grains 15%, mafic rocks 2%, occasionally pyrite nodules, fine muscovite and occasionally biotite flakes, lower to upper fine prograding toward bottom to lower medium and occasionally upper medium, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix and scattered replacement dolomite, amber to dark brown scattered bitumen in pores, slow fainted white cut, weak straw yellow fluorescence **Argillaceous Siltstone 7%:** medium grey and medium brownish-grey, lower very fine quartz, angular to subrounded, well sorted, quartz and argillaceous cement, slightly dolomitic in part, locally very fine to fine muscovite flacks, grading to dark grey siltitic shale, rare bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, rare fracture zone infilled with large crystalline calcite, **Siltitic Shale 3%:** medium to dark brownish-grey, very siltitic to locally slightly siltitic, abundant organic material in part, blocky , medium indurated, scattered slickenside surfaces.

861-881 m Argillaceous Siltstone 75-80%: light to medium grey and medium brownish-grey, lower very fine quartz, angular to subrounded, well sorted, slightly to abundant argillaceous, quartz and argillaceous cement, slightly dolomitic in part, locally very fine to fine muscovite flacks, grading to dark grey siltitic shale, rare bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, rare fracture zone infilled with large crystalline calcite, **Siltitic Shale 20-23%:** medium to dark brownish-grey, very siltitic to locally slightly siltitic, abundant organic material in part, blocky, medium indurated, scattered slickenside surfaces, **Sandstone 2%:** medium grey upper and greenish-

grey lower, argillaceous, , amber to dark brown scattered bitumen in pores, slow fainted white cut, weak straw yellow fluorescence.

881-896 m Argillaceous Siltstone 92%: light to medium grey and medium brownish-grey, lower very fine quartz, angular to subrounded, well sorted, slightly to abundant argillaceous, quartz and argillaceous cement, slightly dolomitic in part, locally very fine to fine muscovite flacks, grading to dark grey siltitic shale, rare bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, rare fracture zone infilled with large crystalline calcite, **Siltitic Shale 8%:** medium to dark brownish-grey, very siltitic to locally slightly siltitic, abundant organic material in part, blocky, medium indurated, scattered slickenside surfaces.

896-901 m Argillaceous Siltstone 87%: light to medium grey and medium brownish-grey, lower very fine quartz, angular to subrounded, well sorted, slightly to abundant argillaceous, quartz and argillaceous cement, slightly dolomitic in part, locally very fine to fine muscovite flacks, grading to dark grey siltitic shale, rare bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, rare fracture zone infilled with large crystalline calcite, **Siltitic Shale 10%:** medium to dark brownish-grey, very siltitic to locally slightly siltitic, abundant organic material in part, blocky, medium indurated, scattered slickenside surfaces, **Sandstone 3%:** medium grey upper and greenish-grey lower, argillaceous, , amber to dark brown scattered bitumen in pores, slow fainted white cut, weak straw yellow fluorescence.

901-929 m Sandstone 98%: light to medium and greenish-grey, very slightly argillaceous in part, translucent and frosted quartz 84%, white with traces of yellowish and flesh feldspar 7% with very rare pink, lithic grains 6%, mafic rocks 2%, occasionally pyrite nodules, rare fine muscovite and occasionally biotite flakes, glauconite traces, upper fine to lower medium and 8% upper medium, prograding toward bottom to upper medium and very rare lower coarse 5%, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix and scattered replacement dolomite with none to 2-3% argillaceous matrix, abundant amber to rare dark brown bitumen in pores, orange uncut fluorescence from bitumen, slow fainted white cut, weak straw yellow fluorescence, **Siltitic Shale 2%:** medium to dark greenish-grey and dark grey, locally slightly siltitic, blocky, medium indurated, scattered slickenside surfaces.

929-955 m Sandstone 95%: light to medium and greenish-grey, very slightly argillaceous in part, translucent and frosted quartz 84%, white with traces of yellowish and flesh feldspar 7% with very rare pink, lithic grains 6%, mafic rocks 2%, occasionally pyrite nodules, traces jasper, rare fine muscovite and occasionally biotite flakes, glauconite traces, upper fine to lower medium and 8% upper medium, prograding toward bottom to upper medium and very rare lower coarse 5%, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix and abundant replacement dolomite with none to 2-3% argillaceous matrix, locally abundant calcite cement, abundant amber to rare dark brown bitumen in pores, orange uncut fluorescence from bitumen, slow fainted white cut, weak straw yellow fluorescence, **Siltitic Shale 2%:** medium to dark greenish-grey and dark grey, locally slightly siltitic, blocky, medium indurated, scattered slickenside surfaces, **Argillaceous Siltstone 3%:** light to medium grey and medium greenish-grey, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz and argillaceous cement,

slightly dolomitic in part, locally very fine to fine muscovite flacks, grading to dark grey siltitic shale, rare bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses.

955-987 m Sandstone 94%: light to medium and greenish-grey, very slightly argillaceous in part, translucent and frosted quartz 84%, white with traces of yellowish and flesh feldspar 7% with very rare pink, lithic grains 6%, mafic rocks 2%, occasionally pyrite nodules, traces jasper, rare fine muscovite and occasionally biotite flakes, glauconite traces, upper fine to lower medium and 8% upper medium, prograding toward bottom to upper medium and very rare lower coarse 5%, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix and abundant replacement dolomite with none to 2-3% argillaceous matrix, locally abundant calcite cement and locally thin fractures infilled with calcite, abundant amber to rare dark brown bitumen in pores, orange uncut fluorescence from bitumen, slow fainted white cut, weak straw yellow fluorescence, **Shale 3%:** medium to dark greenish-grey and dark grey, locally waxy greenish slightly bentonitic, blocky, medium indurated, scattered slickenside surfaces, grading locally to **Argillaceous Siltstone 3%:** medium grey and medium greenish-grey and locally brownish, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz and argillaceous cement, slightly dolomitic in part, locally very fine to fine muscovite flacks.

987-1002 m Sandstone 85-90%: light to medium and greenish-grey, very slightly argillaceous in part, translucent and frosted quartz 84%, white with traces of yellowish and flesh feldspar 7% with very rare pink, lithic grains 6%, mafic rocks 2%, occasionally pyrite nodules, traces jasper, rare fine muscovite and occasionally biotite flakes, glauconite traces, upper fine to upper medium and 5% lower coarse, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix and abundant replacement dolomite, locally abundant calcite cement and locally thin fractures infilled with calcite, abundant amber to rare dark brown bitumen in pores, orange uncut fluorescence from bitumen grains, slow fainted white cut, weak straw yellow fluorescence, **Siltitic Shale 6%:** medium to dark greenish-grey and dark brown, siltitic in part, blocky, medium indurated, **Argillaceous Siltstone 9%:** medium grey and medium greenish-grey and locally brownish, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz and argillaceous cement, slightly dolomitic in part, locally very fine to fine muscovite flacks.

1002-1011 m Sandstone 97%: light to medium and greenish-grey, very slightly argillaceous in part, translucent and frosted quartz 86%, white with traces of yellowish and flesh feldspar 5% with very rare pink, lithic grains 5%, mafic rocks 3%, glauconite traces, upper fine to upper medium, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth, quartz cement and matrix and replacement dolomite, amber to rare dark brown bitumen in pores, slow fainted white cut, weak straw yellow fluorescence, **Siltitic Shale 3%:** medium to dark greenish-grey and dark brown, siltitic in part, blocky, medium indurated, scattered slickenside surfaces.

1011-1017 m Argillaceous Siltstone 65-80%: medium grey and medium greenish-grey and locally brownish, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz and argillaceous cement, slightly dolomitic in part, locally very fine to fine muscovite flacks, abundant bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, **Sandstone 20-35%:** as above.

1017-1026 m Sandstone 78%: light to medium and greenish-grey, very slightly argillaceous in part, translucent and frosted quartz 80%, white with traces of yellowish and flesh feldspar 6%, lithic grains 11%, mafic rocks 2%, rare fine muscovite, upper fine to upper medium, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth, quartz cement and matrix and abundant replacement dolomite with none to scattered 1-2% argillaceous matrix, locally abundant calcite cement and grains, moderately amber to rare dark brown bitumen in pores, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw yellow fluorescence, **Siltitic Shale 8%:** medium greenish-grey, locally slightly siltitic, blocky, medium indurated, **Argillaceous Siltstone 14%:** light to medium grey and medium greenish-grey, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz dolomite and argillaceous cement, locally very fine to fine muscovite flacks, grading to dark grey siltitic shale, rare bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses.

1026-1047 m Sandstone 97%: light to medium and greenish-grey, translucent and frosted quartz 84%, white with traces of yellowish and flesh feldspar 6% lithic grains 7%, mafic rocks 2%, occasionally pyrite nodules, fine muscovite and occasionally biotite flakes, glauconite traces, upper fine to lower medium, angular to subrounded, well sorted, quartz overgrowth partially infill pores, quartz cement and matrix 65-90% and replacement dolomite and locally abundant calcite cement 10-35%, moderate amber to rare dark brown bitumen in pores, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw yellow fluorescence, **Siltitic Shale 3%:** medium to dark greenish-grey and dark grey, non to very siltitic grading locally to argillaceous siltstone, blocky, medium indurated, scattered slickenside surfaces.

1047-1074 m Siltstone 70%: light to medium grey and medium greenish-grey, lower very fine quartz, angular to subrounded, well sorted, very argillaceous to slightly and locally non argillaceous, quartz rare dolomite and argillaceous cement, locally very fine to fine muscovite flacks, grading to dark grey siltitic shale, bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses on top with scattered bitumen infill toward bottom, grading locally to very thin very fine sandstone stringers, interbedded with **Siltitic Shale 30%:** medium to dark greenish-grey and dark grey, non to very siltitic grading locally to argillaceous siltstone, blocky, medium indurated, scattered slickenside surfaces.

1074-1086 m Sandstone 85%: light to medium and greenish-grey, translucent and frosted quartz 75%, white with traces of yellowish and flesh feldspar 6% lithic grains 15%, mafic rocks 3%, occasionally pyrite nodules, fine muscovite and occasionally biotite flakes, upper fine to lower medium, angular to subrounded, well sorted, quartz overgrowth partially infill pores, quartz cement and matrix 75% and replacement dolomite and locally abundant calcite cement 25%, moderate amber to rare dark brown bitumen in pores, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw yellow fluorescence, **Siltitic Shale 15%:** medium to dark greenish-grey and dark grey, non to very siltitic grading locally to argillaceous siltstone, blocky, medium indurated.

1086-1093 m Siltitic Shale 75%: medium to dark grey and rare black, non to abundant siltitic grading locally to argillaceous siltstone, blocky, medium indurated, micromicaceous, occasionally slickenside surfaces, grading to **Argillaceous Siltstone 25%:** light to medium grey, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz dolomite and argillaceous cement, locally very

fine to fine muscovite and scattered biotite flacks, grading to dark grey siltitic shale, rare bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, with rare very fine sandstone thin stringers.

1093-1102 m Sandstone 90%: light to medium and greenish-grey, translucent and frosted quartz 75%, white with traces of yellowish and flesh feldspar 6% lithic grains 15%, mafic rocks 3%, occasionally pyrite nodules, fine muscovite and occasionally biotite flakes, upper fine to lower medium, angular to subrounded, well sorted, quartz overgrowth partially infill pores, quartz cement and matrix 75% and replacement dolomite and locally abundant calcite cement 25%, moderate amber to rare dark brown bitumen in pores, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw yellow fluorescence, **Siltitic Shale 10%:** medium to dark greenish-grey and dark grey, non to very siltitic grading locally to argillaceous siltstone, blocky, medium indurated.

1102-1116 m Siltitic Shale 75%: medium to dark grey and rare black, non to abundant siltitic grading locally to argillaceous siltstone, blocky, medium indurated, micromicaceous, occasionally slickenside surfaces, grading to **Argillaceous Siltstone 25%:** light to medium grey, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz dolomite and argillaceous cement, locally very fine to fine muscovite and scattered biotite flacks, grading to dark grey siltitic shale, rare bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, with rare very fine sandstone thin stringers.

1116-1125 m Argillaceous Siltstone 85%: light to medium grey, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz dolomite and argillaceous cement, locally very fine to fine muscovite and scattered biotite flacks, grading to dark grey siltitic shale, with very fine sandstone thin stringers interbedded with **Siltitic Shale 15%:** medium to dark grey and rare black, abundant dark brown with organic matter, non to abundant siltitic grading locally to argillaceous siltstone, blocky, medium indurated, micromicaceous, occasionally slickenside surfaces.

1125-1143 m Sandstone 85%: light to medium grey and greenish-grey, translucent and frosted quartz 80%, white with traces of yellowish and flesh feldspar 6% lithic grains 10%, mafic rocks 2%, fine muscovite and occasionally biotite flakes, upper fine to upper medium prograding toward bottom, angular to subrounded, well sorted, quartz overgrowth partially infill pores, quartz cement and matrix 95% and replacement dolomite 5%, scattered thin fractures and veins infilled with calcite, moderate amber to rare dark brown bitumen in pores, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw yellow fluorescence on bottom (1143-1149 m), **Siltitic Shale 15%:** medium to dark greenish-grey and dark grey, dark brown when high organic matter content, non to very siltitic grading locally to argillaceous siltstone, blocky, medium indurated.

1143-1171 m Sandstone 50%: light to medium grey and greenish-grey, translucent and frosted quartz 80%, white with traces of yellowish and flesh feldspar 6% lithic grains 10%, mafic rocks 2%, fine muscovite and occasionally biotite flakes, upper fine to upper medium, angular to subrounded, well sorted, quartz overgrowth partially infill pores, quartz cement and matrix 90% replacement dolomite 5%, locally argillaceous matrix 3-5%, scattered thin fractures and veins infilled with calcite, moderate to abundant amber to rare dark brown bitumen in pores and thin fractures, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw yellow fluorescence, **Shale 35%:**

medium to dark greenish-grey and dark grey, dark brown with organic matter content, non to very siltitic grading locally to argillaceous siltstone, blocky, medium indurated, rare slickenside surfaces, **Argillaceous Siltstone 15%:** light to medium grey, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz dolomite and argillaceous cement, locally very fine to fine muscovite and scattered biotite flacks, grading to dark grey siltitic shale, with very fine sandstone thin stringers.

1171-1183 m Shale 55%: medium to dark greenish-grey and dark grey 35%, dark brown with organic matter content 20%, non to very siltitic grading locally to argillaceous siltstone, blocky, medium indurated, rare slickenside surfaces, **Argillaceous Siltstone 5%:** light to medium grey, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz dolomite and argillaceous cement, locally very fine to fine muscovite and scattered biotite flacks, grading to dark grey siltitic shale, with very fine sandstone thin stringers **Calcitic Dolomite 2-3%:** cream to very light brown, microcrystalline to cryptocrystalline dolomite crystals, cryptocrystalline calcite matrix supported fabric, tight, no shows, **Sandstone 37%:** light to medium grey and greenish-grey, translucent and frosted quartz 80%, white with traces of yellowish and flesh feldspar 6% lithic grains 10%, mafic rocks 2%, fine muscovite and occasionally biotite flakes, upper fine to upper medium, angular to subrounded, well sorted, quartz overgrowth partially infill pores, quartz cement and matrix 90% replacement dolomite 5%, locally argillaceous matrix 3-5%, scattered thin fractures and veins infilled with calcite, moderate to abundant amber to rare dark brown bitumen in pores and thin fractures, scattered orange uncut fluorescence from bitumen, slow developing fainted white cut, weak straw yellow fluorescence.

1183-1198 m Sandstone 100%: light to medium grey and greenish-grey, translucent and frosted quartz 89%, white with traces of yellowish and flesh feldspar 5% lithic grains 4%, mafic rocks 2%, fine muscovite and occasionally biotite flakes, lower to upper medium, angular to subrounded, well sorted, quartz overgrowth partially infill pores, quartz cement and matrix 90% replacement dolomite 5-7%, abundant amber to rare dark brown bitumen in pores and thin fractures (floating in washed water), orange uncut fluorescence from bitumen, slow developing fainted white cut, weak straw yellow fluorescence.

1198-1208 m Sandstone 100%: light to medium grey and greenish-grey, translucent and frosted quartz 80%, white with traces of yellowish and flesh feldspar 6% lithic grains 8%, mafic rocks 5%, scattered fine muscovite and occasionally biotite flakes, upper fine to lower medium, angular to subrounded, well sorted, quartz overgrowth infill pores, quartz cement and matrix 90% replacement dolomite 8-10% and locally abundant calcite cement, very abundant amber to rare dark brown bitumen in pores and thin fractures (floating in washed water), orange uncut fluorescence from bitumen, slow developing fainted white cut, weak straw yellow fluorescence.

1208-1215 m Argillaceous Siltstone 100%: light to medium grey, lower very fine quartz, angular to subrounded, well sorted, slightly to very argillaceous, quartz dolomite and argillaceous cement, locally very fine to fine muscovite and scattered biotite flacks, grading to dark grey siltitic shale, with very fine sandstone thin stringers, moderate to abundant amber to rare dark brown bitumen in pores and thin layers.

1215-1236 m Sandstone 100%: light to medium grey and greenish-grey, translucent and frosted quartz 80%, white with traces of yellowish and flesh feldspar 6% lithic grains 8%, mafic rocks 5%,

scattered fine muscovite and occasionally biotite flakes, upper fine to lower medium, angular to subrounded, well sorted, quartz overgrowth infill pores, quartz cement and matrix 90% replacement dolomite 8-10% and locally abundant calcite cement, very abundant amber to rare dark brown bitumen in pores and thin fractures (floating in washed water), orange uncut fluorescence from bitumen, instant moderate white cut, straw yellow fluorescence, with very scattered thin light grey argillaceous siltstone interbeds, and **Dolomite traces:** cream to very light brown thin stringers, microcrystalline to cryptocrystalline dolomite crystals, matrix supported fabric, tight.

1236-1243 m Argillaceous Siltstone 40%: light to medium grey, lower very fine quartz, angular to subrounded, well sorted, slightly to very argillaceous, quartz dolomite and argillaceous cement, locally very fine to fine muscovite and scattered biotite flacks, grading to dark grey siltitic shale, with very fine sandstone thin stringers, moderate to abundant amber to rare dark brown bitumen in pores and thin layers, **Sandstone 60%:** as above.

1243-1257 m Sandstone 95%: light to medium grey and greenish-grey, translucent and frosted quartz 80%, white with traces of yellowish and flesh feldspar 6% lithic grains 8%, mafic rocks 5%, scattered fine muscovite and occasionally biotite flakes, upper fine to upper medium, angular to subrounded, well sorted, quartz overgrowth infill pores, quartz cement and matrix 90% replacement dolomite 8-10% and locally abundant calcite cement, very abundant amber to rare dark brown bitumen in pores and thin fractures (floating in washed water), orange uncut fluorescence from bitumen, instant moderate white cut, straw yellow fluorescence, with very scattered thin light grey argillaceous siltstone interbeds, and **Dolomite traces:** cream to very light brown thin stringers, microcrystalline to cryptocrystalline dolomite crystals, matrix supported fabric, tight, **Shale 5%:** medium to dark greenish-grey and dark grey, occasionally dark brown with organic matter content, non to slightly siltitic grading locally to argillaceous siltstone, blocky, medium indurated, rare slickenside surfaces.

1257-1276 m Sandstone 100%: light to medium grey and greenish-grey, translucent and frosted quartz 80%, white with traces of yellowish and flesh feldspar 6% lithic grains 8%, mafic rocks 5%, scattered fine muscovite and occasionally biotite flakes, upper fine to lower medium, angular to subrounded, well sorted, quartz overgrowth infill pores, quartz cement and matrix 90% replacement dolomite 8-10% and locally abundant calcite cement, very abundant amber to rare dark brown bitumen in pores and thin fractures (floating in washed water), orange uncut fluorescence from bitumen, instant moderate white cut, straw yellow fluorescence, with very scattered thin light grey argillaceous siltstone interbeds, and **Dolomite traces:** cream to very light brown thin stringers, microcrystalline to cryptocrystalline dolomite crystals, matrix supported fabric, tight.

1276-1279 m Sandstone 100%: light to medium grey and greenish-grey, translucent and frosted quartz 85%, white with traces of yellowish and flesh feldspar 6% lithic grains 6%, mafic rocks 2%, scattered fine muscovite and occasionally biotite flakes, lower fine to lower medium, angular to subrounded, well sorted, quartz overgrowth infill pores, quartz cement and matrix 85% replacement dolomite 12% and locally abundant calcite cement, very abundant amber to rare dark brown bitumen in pores and thin fractures (floating in washed water), orange uncut fluorescence from bitumen, instant moderate white cut, straw yellow fluorescence.

1279-1304 m Sandstone 95%: light to medium grey and greenish-grey, translucent and frosted quartz 82%, white with traces of yellowish and flesh feldspar 6% lithic grains 8%, mafic rocks 3%, scattered fine muscovite and occasionally biotite flakes, upper fine to upper medium, angular to subrounded, well sorted, quartz overgrowth infill pores, quartz cement and matrix 95% replacement dolomite 5% and locally abundant calcite cement, moderate amber to rare dark brown bitumen in pores and thin fractures (floating in washed water), orange uncut fluorescence from bitumen, instant moderate white cut, straw yellow fluorescence, with very scattered thin light grey argillaceous siltstone interbeds, and **Shale 3-5%:** medium to dark greenish-grey and dark grey, occasionally dark brown with organic matter content, non to slightly siltitic grading locally to argillaceous siltstone, blocky, medium indurated, rare slickenside surfaces.

1304-1308 m Sandstone 100%: light to medium grey and greenish-grey, translucent and frosted quartz 82%, white with traces of yellowish and flesh feldspar 6% lithic grains 8%, mafic rocks 3%, scattered fine muscovite and occasionally biotite flakes, upper fine to upper medium, angular to subrounded, well sorted, quartz overgrowth infill pores, quartz cement and matrix 95% replacement dolomite 5% and locally abundant calcite cement, moderate amber to rare dark brown bitumen in pores and thin fractures (floating in washed water), orange uncut fluorescence from bitumen, instant moderate white cut, straw yellow fluorescence, with very scattered thin light grey argillaceous siltstone interbeds.

1308-1320 m Sandstone 60%: light to medium grey and greenish-grey, translucent and frosted quartz 82%, white with traces of yellowish and flesh feldspar 6% lithic grains 8%, mafic rocks 3%, scattered fine muscovite and occasionally biotite flakes, lower fine to lower medium, angular to subrounded, well sorted, quartz overgrowth infill pores, quartz cement and matrix 95% replacement dolomite 5% and locally abundant calcite cement, moderate amber to rare dark brown bitumen in pores and thin fractures (floating in washed water), tight, with **Argillaceous Siltstone 40%:** light to medium grey, lower very fine quartz, angular to subrounded, well sorted, slightly to very argillaceous, quartz dolomite and argillaceous cement, locally very fine to fine muscovite and scattered biotite flacks, grading to dark grey siltitic shale with very fine sandstone thin stringers, moderate to abundant amber to rare dark brown bitumen in pores.

1320-1334 m Shale 40%: dominantly dark brown and dark grey with medium greenish-grey sequences, when dark brown with organic matter content, non to slightly siltitic, blocky, medium indurated, rare slickenside surfaces, interbedded with **Sandstone 60%:** as above with instant white cut, straw yellow fluorescence.

1334-1347 m Sandstone 100%: light to medium grey and greenish-grey, translucent and frosted quartz 82%, white with yellowish rare pink and flesh feldspar 6%, lithic grains 8%, mafic rocks 3%, traces jasper, scattered fine muscovite and occasionally biotite flakes, upper fine to lower coarse, angular to subrounded, medium to poor sorted, quartz overgrowth infill pores, quartz cement and matrix 95% replacement dolomite 3-5% and locally abundant calcite cement, moderate amber to rare dark brown bitumen in pores and thin fractures (floating in washed water), scattered orange uncut fluorescence from bitumen, tight.

1347-1356 m Sandstone 100%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 82%, white with yellowish rare and feldspar 6%, lithic grains 6%, mafic rocks 2%, traces jasper, scattered fine muscovite flakes, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 3% and traces calcite cement, moderate to scattered amber to rare dark brown bitumen in pores, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw-yellow fluorescence.

1356-1380 m Sandstone 70-80%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 82%, white with yellowish rare and feldspar 6%, lithic grains 6%, mafic rocks 2%, traces jasper, scattered fine muscovite flakes, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 3% and traces calcite cement, moderate to scattered amber to rare dark brown bitumen in pores, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw-yellow fluorescence, **Shale 15-20%:** dominantly medium to dark grey with dark brown waxy sequences, when dark brown with organic matter content, non to slightly siltitic, blocky, medium indurated, abundant slickenside surfaces, interbedded with **Argillaceous Siltstone 5%:** light to medium grey and slightly brownish, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz and rare dolomite and argillaceous cement, scattered very fine to fine muscovite, moderate to abundant amber to rare dark brown bitumen in pores, tight.

1380-1386 m Sandstone 100%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 82%, white with yellowish rare and feldspar 6%, lithic grains 6%, mafic rocks 2%, traces jasper, scattered fine muscovite flakes, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 3% and traces calcite cement, moderate to scattered amber to rare dark brown bitumen in pores, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw-yellow fluorescence.

1386-1404 m Sandstone 75%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 82%, white with yellowish rare and feldspar 6%, lithic grains 6%, mafic rocks 2%, traces jasper, scattered fine muscovite flakes, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 3% and traces calcite cement, moderate to scattered amber to rare dark brown bitumen in pores, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw-yellow fluorescence, **Shale 20%:** dominantly medium to dark grey with dark brown waxy sequences, when dark brown with organic matter content, non to slightly siltitic, blocky, medium indurated, abundant slickenside surfaces, interbedded with **Argillaceous Siltstone 5%:** light to medium grey and slightly brownish, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz and rare dolomite and argillaceous cement, scattered very fine to fine muscovite, moderate to abundant amber to rare dark brown bitumen in pores, tight.

1404-1425 m Sandstone 96%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 82%, white with yellowish rare and feldspar 6%, lithic grains 6%, mafic rocks 2%, traces jasper, scattered fine muscovite flakes, lower fine to lower

medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 3% and traces calcite cement, moderate to scattered amber to rare dark brown bitumen in pores, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw-yellow fluorescence, **Dolomitic Healed Fractures 2%:** very coarse crystalline rhombic dolomite, polymodal size, euhedral to anhedral shape, idiotopic texture, with no or drusy cement, no matrix, tight **Argillaceous Siltstone 2%:** light to medium grey and slightly brownish, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz and rare dolomite and argillaceous cement, scattered very fine to fine muscovite, moderate to abundant amber to rare dark brown bitumen in pores, tight.

1425-1440 m Sandstone 97%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 82%, white with yellowish rare and feldspar 6%, lithic grains 6%, mafic rocks 2%, traces jasper, scattered fine muscovite flakes, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 3% and traces calcite cement, moderate to scattered amber to rare dark brown bitumen in pores, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw-yellow fluorescence, **Argillaceous Siltstone 3%:** light to medium grey and slightly brownish, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz and rare dolomite and argillaceous cement, scattered very fine to fine muscovite, moderate to abundant amber to rare dark brown bitumen in pores, tight.

1440-1462 m Sandstone 80%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 86%, white with rare yellowish feldspar 5%, lithic grains 7%, mafic rocks 1-2%, abundant muscovite and scattered biotite flakes 1%, traces jasper, upper fine to upper medium and 2-3% lower coarse, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 1-2% and traces calcite cement, locally abundant calcite cement (1455m sample), moderate amber and dark brown bitumen and organic material in pores veins and very small lenses, scattered orange uncut fluorescence from bitumen, no other shows, grading locally to **Siltitic Shale 15%:** medium grey to rare dark grey, siltitic and occasionally micromicaceous, blocky, medium indurated, and **Shale 5%:** greenish grey to medium brown, rare micromicaceous, rare slickenside surfaces.

1462-1485 m Sandstone 97%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 86%, white with rare yellowish and locally flesh feldspar 6%, lithic grains 6%, mafic rocks 3%, abundant muscovite and scattered biotite flakes 1%, traces jasper, glauconite traces, upper fine to upper medium and scattered lower coarse, angular to subrounded, well sorted, abundant quartz overgrowth infill pores and in thin sub-mm fractures, quartz cement and matrix 90% replacement dolomite 3% cement and locally abundant calcite cement, moderate amber and dark brown bitumen and organic material in pores veins and very small lenses, scattered to abundant orange uncut fluorescence from bitumen, very slow developing fainted white cut, scattered very thin **Dolomite** lenses with cream microcrystalline grain-supported dolomite, tight (1464-1467 m samples), **Argillaceous Siltstone 3%:** light to medium grey and slightly brownish, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz and rare dolomite and argillaceous cement, scattered very fine to fine muscovite, moderate to abundant amber to rare dark brown bitumen in pores, tight, and scattered medium grey shales.

1485-1498 m Siltstone 45-55%: light to medium grey, lower very fine quartz, angular to subrounded, well sorted, non to slightly argillaceous, quartz and rare dolomite and argillaceous cement, very fine to fine disseminate muscovite, grading to **Siltitic Shale 45-55%:** medium grey to rare dark grey, siltitic and micromicaceous, blocky, medium indurated, scattered organic material and amber bitumen hair thin interbeds, thin fractures infilled with milky large crystalline anhedral calcite.

1498-1509 m Sandstone 85%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 86%, white with rare yellowish feldspar 5%, lithic grains 7%, mafic rocks 1-2%, abundant muscovite and scattered biotite flakes 1%, traces jasper, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 1-2% and traces calcite cement, locally abundant calcite cement (1455 m sample), moderate amber and dark brown bitumen and organic material in pores veins and very small lenses, scattered orange uncut fluorescence from bitumen, no other shows, **Siltitic Shale 15%:** medium grey to rare dark grey, siltitic and occasionally micromicaceous, blocky, grading locally to argillaceous siltstone.

1509-1532 m Sandstone 55%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 86%, white with rare yellowish feldspar 5%, lithic grains 7%, mafic rocks 1-2%, abundant muscovite and scattered biotite flakes 1%, traces jasper, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 1-2% and traces calcite cement, moderate amber and dark brown bitumen and organic material in pores veins and very small lenses, scattered orange uncut fluorescence from bitumen, no other shows, **Siltitic Shale 45%:** medium grey to rare dark grey, siltitic and occasionally micromicaceous, blocky, grading locally to argillaceous siltstone.

1532-1538 m Siltstone 45-55%: light to medium grey, lower very fine quartz, angular to subrounded, well sorted, argillaceous, quartz and rare dolomite and argillaceous cement, very fine to fine disseminate muscovite, abundant amber and dark brown bitumen and organic material in pores veins and very small lenses, scattered orange uncut fluorescence from bitumen grading to dark brown Siltitic Shale, abundant slickenside surfaces particularly in bituminous shales, **Open Fracture 1533-1534 m:** 2m fracture zone infilled with milky anhedral microcrystalline to locally large crystalline calcite, bright white uncut fluorescence, instant milky strong white cut, bluish-white fluorescence.

1538-1550 m Sandstone 85%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 86%, white with rare yellowish feldspar 5%, lithic grains 7%, mafic rocks 1-2%, abundant muscovite and scattered biotite flakes 1%, traces jasper, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 1-2% and traces calcite cement, locally abundant calcite cement (1455m sample), moderate amber and dark brown bitumen and organic material in pores thin interbeds and small lenses, very abundant in 1544-1549 m, orange uncut fluorescence from bitumen, instant milky white cut, bluish-white fluorescence, **Siltitic Shale 15%:** medium grey to rare dark grey, siltitic and occasionally micromicaceous, blocky, grading locally to argillaceous siltstone, **Open Fracture 1541-1548 m:** 7m fracture zone infilled with milky and locally transparent anhedral to

sub-euhedral microcrystalline to locally large crystalline calcite, bright white uncut fluorescence, instant milky strong white cut, bluish-white fluorescence.

1550-1565 m Sandstone 90%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 86%, white with rare yellowish feldspar 5%, lithic grains 5%, mafic rocks 1%, rare muscovite flakes, traces jasper, lower to upper medium and rare upper fine, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 1-2% and traces calcite cement, locally abundant calcite cement, no shows, **Siltitic Shale 5%:** medium grey to rare dark grey, siltitic and occasionally micromicaceous, blocky, grading locally to argillaceous siltstone, **Siltstone 45-55%:** light to medium grey, lower very fine quartz, angular to subrounded, well sorted, argillaceous, quartz and rare dolomite and argillaceous cement, very fine to fine disseminate muscovite, abundant amber and dark brown bitumen and organic material in pores veins and very small lenses, scattered orange uncut fluorescence from bitumen **Healed Fracture 1556 m, 1658 m:** fracture zone infilled with milky anhedral microcrystalline to locally large crystalline calcite, tight, no shows.

1565-1568 m Siltstone 100%: light to medium grey, lower very fine quartz, angular to subrounded, well sorted, argillaceous, quartz and rare dolomite and argillaceous cement, very fine to fine disseminate muscovite.

1568-1572 m Siltitic Shale 100%: medium grey to rare dark grey, siltitic and occasionally micromicaceous, blocky, grading locally to argillaceous siltstone.

1572-1592 m Sandstone 70-75%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 86%, white with rare yellowish feldspar 5%, lithic grains 5%, mafic rocks 1%, rare muscovite flakes, traces jasper, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 1-2% and traces calcite cement, locally abundant calcite cement, no shows, **Siltitic Shale 25-30%:** medium grey to rare dark grey, siltitic and occasionally micromicaceous, blocky, grading locally to argillaceous siltstone, scattered chips with slickenside surfaces, **Healed Fracture 1578m:** fracture zone infilled with clean milky white anhedral microcrystalline to locally large crystalline calcite, tight, no shows.

1592-1611 m Siltitic Shale 80%: light to medium grey and scattered dark grey, moderately to very siltitic and scattered micromicaceous, blocky, medium indurated, occasionally fine disseminated organic matter grading locally to argillaceous siltstone, chips with slickenside surfaces, fracture / fault zone in 1592-1595m interval, interbedded locally with thin layers of **Sandstone 10-15%:** light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 81%, white with rare yellowish feldspar 5%, lithic grains 10%, mafic rocks 1%, moderately abundant muscovite flakes, traces jasper, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 95% replacement dolomite, moderate amber and dark brown bitumen and organic material in pores thin interbeds and small lenses, no shows **Siltstone 5%:** light grey, lower very fine quartz, angular to subrounded, well sorted, non to slightly argillaceous, quartz rare dolomite and argillaceous cement, very fine to fine disseminate muscovite, abundant amber and dark brown bitumen and organic material in small lenses, tight, no

shows, **Healed Fracture 1597 m:** fracture zone infilled with clean milky white anhedral microcrystalline to locally large crystalline calcite, tight, no shows.

1611-1638 m Siltitic Shale 50%: light to medium grey and scattered dark grey, moderately to very siltitic and scattered micromicaceous, blocky, medium indurated, occasionally fine disseminated organic matter grading locally to argillaceous siltstone, chips with slickenside surfaces, interbedded locally with thin layers of **Sandstone 40%:** light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 81%, white with rare yellowish feldspar 5%, lithic grains 10%, mafic rocks 1%, moderately abundant muscovite flakes, traces jasper, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 95% replacement dolomite, no shows **Siltstone 10%:** light grey, lower very fine quartz, angular to subrounded, well sorted, non to slightly argillaceous, quartz rare dolomite and argillaceous cement, very fine to fine disseminate muscovite, tight, no shows, **Healed Fracture 1614m:** fracture zone infilled with clean milky white anhedral microcrystalline to locally large crystalline calcite, tight, no shows.

1638-1647 m Siltitic Shale 60%: light to medium grey and scattered dark grey, moderately to very siltitic and scattered micromicaceous, blocky, medium indurated, occasionally fine disseminated organic matter grading locally to argillaceous siltstone, interbedded locally with thin layers of **Sandstone 40%:** light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 81%, white with rare yellowish feldspar 5%, lithic grains 10%, mafic rocks 1%, moderately abundant muscovite flakes, traces jasper, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 95% replacement dolomite, no shows.

1647-1662 m Siltitic Shale 85%: light to medium grey and scattered dark grey, moderately to very siltitic and scattered micromicaceous, blocky, medium indurated, occasionally fine disseminated organic matter grading locally to argillaceous siltstone, interbedded locally with thin layers of **Siltstone 15%:** light grey, lower very fine quartz, angular to subrounded, well sorted, non to slightly argillaceous, quartz rare dolomite and argillaceous cement, very fine to fine disseminate muscovite, tight, no shows.

1662-1680 m Sandstone 75%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 86%, white with rare yellowish feldspar 6%, lithic grains 8%, mafic rocks 2%, abundant muscovite and locally biotite flakes, traces jasper, lower to upper medium and rare upper fine, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 65% dolomite 1-2% and traces calcite cement, locally abundant calcite cement 30-40%, no shows, **Siltitic Shale 25%:** medium grey to rare dark grey, siltitic, micromicaceous, blocky, grading locally to argillaceous siltstone.

1680-1703 m Sandstone 90%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 86%, white with rare yellowish feldspar 8%, lithic grains 8%, mafic rocks 3%, abundant muscovite and locally biotite flakes, traces jasper, upper fine to upper medium on top prograding to medium with 10% lower coarse on bottom with micro-conglomerate traces, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 95% dolomite 5% and traces calcite cement, rare amber to dark brown and black bitumen in

pores and mm-thin layers, no shows, **Siltitic Shale 10%:** medium grey to rare dark grey, siltitic, micromicaceous, blocky, grading locally to argillaceous siltstone, more abundant toward bottom.

1703-1711 m Siltitic Shale 85%: medium and dark grey, slightly to moderately siltitic, micromicaceous in part, blocky, medium indurated, grading locally to argillaceous siltstone, interbedded locally with thin layers of **Siltstone 10%:** light grey, lower very fine quartz, angular to subrounded, well sorted, non to slightly argillaceous, quartz rare dolomite and argillaceous cement, very fine to fine disseminate muscovite, tight, **Sandstone 5%:** light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 86%, white with rare yellowish feldspar 8%, lithic grains 8%, mafic rocks 3%, abundant muscovite and locally biotite flakes, traces jasper, upper fine to upper medium on top prograding to medium with 10% lower coarse on bottom with micro-conglomerate traces, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 95% dolomite 5% and traces calcite cement, rare amber to dark brown and black bitumen in pores and mm-thin layers, no shows.

1711-1736 m Siltstone 40%: light grey, lower very fine quartz, angular to surrounded, well sorted, non to slightly argillaceous, quartz rare dolomite and argillaceous cement, very fine to fine disseminate muscovite, tight, grading to **Sandstone 10%:** light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 83%, white with rare yellowish feldspar 6%, lithic grains 8%, mafic rocks 2%, abundant muscovite and locally biotite flakes, traces jasper, upper fine, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 98% dolomite 2% and traces calcite cement, no shows, **Shale 50%:** medium and dark grey, slightly to moderately siltitic, micromicaceous in part, blocky, medium indurated, grading locally to argillaceous siltstone.

1736-1748 m Siltstone 75%: light grey to occasionally medium grey, lower very fine quartz, feldspar 3%, lithic fragments 2%, angular to surrounded, well sorted, non to slightly argillaceous, quartz rare dolomite and argillaceous cement, very fine to fine disseminate muscovite, tight, grading to fine grained **Sandstone 2%:** light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 83%, white with rare yellowish feldspar 6%, lithic grains 8%, mafic rocks 2%, abundant muscovite and locally biotite flakes, traces jasper, upper fine, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 98% dolomite 2% and traces calcite cement, no shows, **Shale 23%:** medium and dark grey and locally slightly greenish-grey, slightly to moderately siltitic, micromicaceous in part, blocky, medium indurated, with scattered thin coarse crystalline calcitic infill veins.

1748-1763 m Siltitic Shale 85%: medium and dark grey, slightly to moderately siltitic grading locally to argillaceous siltstone, micromicaceous in part, blocky, medium indurated, interbedded locally with thin layers of **Siltstone 15%:** light grey to occasionally medium grey, lower very fine quartz, feldspar 3%, lithic fragments 2%, angular to surrounded, well sorted, non to slightly argillaceous, quartz rare dolomite and argillaceous cement, very fine to fine disseminate muscovite, tight.

1763-1794 m Siltstone 70%: light grey to occasionally medium grey, lower very fine quartz, feldspar 3%, lithic fragments 2%, angular to surrounded, well sorted, non to slightly argillaceous, quartz abundant calcite rare dolomite and argillaceous cement, very fine to fine disseminate muscovite, rare

bitumen, tight, grading to fine grained **Calcitic Sandstone 20%:** light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 86%, white with rare yellowish feldspar 5%, lithic grains 6%, mafic rocks 2%, abundant muscovite and locally biotite flakes, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz 50% calcite 45% and dolomite 5% cement, instant fainted milky white cut, bluish-white fluorescence, interbedded with, **Siltitic Shale 10%:** medium and dark grey and locally slightly greenish dark grey, slightly to moderately siltitic, micromicaceous in part, blocky, medium indurated.

Indian Cove Fm 1794 mMD, 1684.8 mTVD, -1646.4 mSS, 505.6 mVS

1794-1817 m Siltitic Argillaceous Limestone 55%: cream to light and medium brownish-grey, mottled in part cream and brown, moderately to abundant siltitic grading to calcareous siltstone, slightly to abundant argillaceous – very fine transparent angular to subangular quartz floating in a calcitic matrix supported fabric, slightly dolomitic in part, moderately abundant muscovite fine disseminate flacks and occasionally biotite, non fossiliferous, mudstone with microcrystalline to scattered lower very fine crystalline well sorted subhedral spary-calcite and partially replacement xenomorphic unimodal subeuhedral dolomite, with scattered rhombic surfaces at high magnification, structureless, occasionally plant fragments and unevenly spread amber bitumen, low relief, instant fainted milky white cut, bluish-white fluorescence (possible from organic matter), grading to **Calcareous Siltstone 27%:** cream to light brown, very fine well sorted angular quartz 98% with lithic grains 5% maphic 2% scattered feldspar, in calcitic matrix supported fabric, abundant muscovite and locally biotite flakes, grading occasionally to **Calcareous Sandstone 15%,** and interbedded with thin **Shale 3%** lenses: medium to dark grey, siltitic and locally calcareous, blocky, medium indurated.

1817-1827 m Siltitic Argillaceous Limestone 85%: cream to light and medium brownish-grey, mottled in part cream and brown, moderately to abundant siltitic grading to calcareous siltstone, slightly to abundant argillaceous – very fine transparent angular to subangular quartz floating in a calcitic matrix supported fabric, dolomitic in part, moderately abundant muscovite fine disseminate flacks and occasionally biotite, non fossiliferous, mudstone with microcrystalline to scattered very very fine crystalline well sorted subhedral spary-calcite and partially replacement xenomorphic unimodal subeuhedral dolomite, with scattered rhombic surfaces at high magnification, structureless, occasionally plant fragments and unevenly spread amber bitumen, low relief, instant fainted milky white cut, bluish-white fluorescence (possible from organic matter), grading to **Calcareous Siltstone 10%:** cream to light brown, very fine well sorted angular quartz 98% with lithic grains 5% maphic 2% scattered feldspar, in calcitic – dolomitic matrix supported fabric, abundant muscovite and locally biotite flakes, grading occasionally to **Calcareous Sandstone** traces and interbedded with thin **Shale 5%** lenses: medium to dark grey, siltitic and locally calcareous, blocky, medium indurated, locally abundant organic matter and plant fragments.

1827-1861 m Siltitic Argillaceous Limestone 75%: cream to light and medium brownish-grey, mottled in part cream and brown, moderately to abundant siltitic grading to calcareous siltstone, slightly to abundant argillaceous – very fine transparent angular to subangular quartz floating in a calcitic matrix supported fabric, moderately abundant muscovite fine disseminate flacks and occasionally biotite, non fossiliferous, mudstone with microcrystalline to scattered very very fine crystalline well sorted subhedral spary-calcite and partially replacement xenomorphic unimodal subeuhedral dolomite,

with scattered rhombic surfaces at high magnification, structureless, occasionally plant fragments and unevenly spread amber bitumen, low relief, instant fainted milky white cut, bluish-white fluorescence (possible from organic matter), grading to **Calcareous Siltstone 15%:** cream to light brown, very fine well sorted angular quartz 98% with lithic grains 5% maphic 2% scattered feldspar, in calcitic – dolomitic matrix supported fabric, abundant muscovite and locally biotite flakes, grading occasionally to **Calcareous Sandstone** traces and interbedded with thin **Shale 10%** lenses: medium to dark grey, siltitic and locally calcareous, blocky, medium indurated, locally abundant organic matter and plant fragments, **Calcite Healed Fractures:** milky white hypidiomorphic to xenomorphic microcrystalline to medium grained crystalline locally fibrous calcite, tight 1827-1830 m and 1839-1848-1857 m).

1861-1881 m Limestone 100%: cream to light and medium brown, mottled in part cream and brown, very slightly siltitic, slightly to abundant argillaceous – very fine transparent angular to subangular quartz floating in a calcitic matrix supported fabric, non fossiliferous mudstone with microcrystalline to scattered lower very fine crystalline well sorted subhedral spary-calcite and partially replacement xenomorphic unimodal subeuhedral dolomite, structureless, low relief, instant fainted milky white cut, bluish-white fluorescence, **Calcite Healed Fractures:** (1869-1881 m interval) abundant milky white hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline locally fibrous and prismatic calcite, tight.

1881-1896 m Limestone 100%: light and medium brown, interbedded with mottled cream and brown sequences, non to very siliceous, slightly argillaceous when lighter colour to abundant argillaceous when dark brown – very fine transparent angular to subangular quartz floating in a calcitic matrix supported fabric, fine disseminated plant fragments and organic matter in brown siliceous limestone, non fossiliferous, occasionally very fine disseminated organic matter, mudstone with microcrystalline to scattered lower very fine crystalline subhedral spary-calcite and scattered partially replacement xenomorphic unimodal subeuhedral dolomite 2-3%, structureless, low relief, instant fainted milky white cut, bluish-white fluorescence.

1896-1901 m Limestone 100%: light and medium brown, interbedded with mottled cream and brown sequences, non to very siliceous, slightly argillaceous when lighter colour to abundant argillaceous when dark brown – very fine transparent angular to subangular quartz floating in a calcitic matrix supported fabric, fine disseminated plant fragments and organic matter in brown siliceous limestone, non fossiliferous, occasionally very fine disseminated organic matter, mudstone with microcrystalline to scattered lower very fine crystalline subhedral spary-calcite and scattered partially replacement xenomorphic unimodal subeuhedral dolomite 2-3%, structureless, low relief, instant fainted milky white cut, bluish-white fluorescence, **Calcite Healed Fractures:** moderately abundant milky white hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline prismatic calcite, clean contacts with the host rock, tight.

1901-1929 m Limestone 100%: light and medium brown, interbedded with mottled cream and brown sequences, non to very siliceous, slightly argillaceous when lighter colour to abundant argillaceous when dark brown – very fine transparent angular to subangular quartz floating in a calcitic matrix supported fabric, fine disseminated plant fragments and organic matter in brown siliceous limestone, non fossiliferous, occasionally very fine disseminated organic matter, mudstone with microcrystalline to scattered lower very fine crystalline subhedral spary-calcite and scattered partially replacement

xenomorphic unimodal subeuhedral dolomite 2-3%, structureless, low relief, instant fainted milky white cut, bluish-white fluorescence.

1929-1950 m Limestone 100%: cream mottled cream and brown sequences, interbedded with light and medium brown, non to very siliceous, slightly argillaceous when lighter colour to abundant argillaceous when dark brown – very fine transparent angular to subangular quartz floating in a calcitic matrix supported fabric, fine disseminated plant fragments and organic matter in brown siliceous limestone, non fossiliferous, occasionally very fine disseminated organic matter, mudstone, structureless, low relief, instant fainted milky white cut, bluish-white fluorescence, **Calcite Healed Fractures:** moderately abundant milky white hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline prismatic calcite, clean contacts with the host rock, tight.

1950-1956 m Limestone 100%: cream mottled cream and brown sequences, interbedded with light and medium brown, non to very siliceous, slightly argillaceous when lighter colour to abundant argillaceous when dark brown – very fine transparent angular to subangular quartz floating in a calcitic matrix supported fabric and scattered partially replacement xenomorphic unimodal subeuhedral dolomite 6% with locally euhedral rhombic visible faces, fine disseminated plant fragments and organic matter in brown siliceous limestone, non fossiliferous, occasionally very fine disseminated organic matter, mudstone, structureless, low relief, instant fainted milky white cut, bluish-white fluorescence, **Calcite Healed Fractures:** abundant milky white hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline prismatic calcite, locally fibrous calcite, clean contacts with the host rock, tight.

1956-1965 m Limestone 100%: cream mottled cream and brown sequences, interbedded with light and medium brown, non to very siliceous, slightly argillaceous when lighter colour to abundant argillaceous when dark brown – very fine transparent angular to subangular quartz floating in a calcitic matrix supported fabric and scattered partially replacement xenomorphic unimodal subeuhedral dolomite 7-8% with locally euhedral rhombic visible faces, fine disseminated plant fragments and organic matter in brown siliceous limestone, non fossiliferous, occasionally very fine disseminated organic matter, mudstone, structureless, low relief, instant fainted milky white cut, bluish-white fluorescence.

1965-1986 m Limestone 100%: cream mottled cream and brown sequences, interbedded with light and medium brown, non to very siliceous, slightly argillaceous when lighter colour to abundant argillaceous when dark brown – very fine transparent angular to subangular quartz floating in a calcitic matrix supported fabric and scattered partially replacement xenomorphic unimodal subeuhedral dolomite 6% with locally euhedral rhombic visible faces, fine disseminated plant fragments and organic matter in brown siliceous limestone, non fossiliferous, occasionally very fine disseminated organic matter, mudstone, structureless, low relief, **Calcite Partially Open Fractures:** abundant milky white hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline prismatic calcite, locally fibrous calcite, clean contacts with the host rock, tight except 1984-1985 m fracture where traces of organic matter lining fracture walls and creating voids – fracture porosity, instant fainted milky white cut, bluish-white fluorescence.

Note 1: clear quartz euhedral shaped late cement.

Note 2: white cut and fluorescence from hydrocarbon rich fluid inclusions in crystalline calcite secondary cements.

1986-2000 m Limestone 98%: cream mottled cream and brown interbedded with medium brown and greyish-brown, non to very siliceous, slightly argillaceous when lighter colour to abundant argillaceous when dark brown, partially replacement xenomorphic unimodal subeuhedral dolomite 8%, fine disseminated plant fragments and organic matter in brown siliceous limestone, non fossiliferous, mudstone, structureless, low relief, **Calcite Partially Open Fractures:** abundant milky white hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline prismatic calcite, clean contacts with the host rock, tight except 1995-1997 m with inferred fracture porosity, , instant very fainted milky white cut, bluish-white fluorescence (white cut and fluorescence from hydrocarbon rich fluid inclusions in crystalline calcite secondary cements),**Shale** 1-3%: greenish-grey, non to slightly siltitic, blocky, medium indurated, with scattered slickenside surfaces, **Sandstone** thin stringers, light greenish-grey, upper very fine to lower fine grained, well sorted, angular to subangular, quartz cement and matrix, tight, no shows.

2000-2012 m Limestone 97%: cream mottled cream and brown interbedded with medium brown and greyish-brown, non to very siliceous, slightly argillaceous when lighter colour to abundant argillaceous when dark brown, partially replacement xenomorphic unimodal subeuhedral dolomite 6%, fine disseminated plant fragments and organic matter in brown siliceous limestone, non fossiliferous, mudstone, structureless, low relief, **Calcite Healed Fractures:** occasionally milky white hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline prismatic calcite, clean contacts with the host rock, tight with inferred fracture porosity, instant very fainted milky white cut, bluish-white fluorescence (white cut and fluorescence from hydrocarbon rich fluid inclusions in crystalline calcite secondary cements), **Shale** 3%: dark grey to greenish-grey, non to abundant siltitic, blocky, medium indurated, **Sandstone** thin stringers, light greenish-grey, upper very fine to lower fine grained, well sorted, angular to subangular, quartz cement and matrix, tight, no shows.

2012-2031 m Limestone 97%: cream mottled cream and brown interbedded with medium brown and greyish-brown, non to very siliceous, slightly argillaceous when lighter colour to abundant argillaceous when dark brown, occasionally xenomorphic unimodal subeuhedral dolomite 4%, fine disseminated plant fragments and organic matter in brown siliceous limestone, non fossiliferous, mudstone, structureless, low relief, **Calcite Healed Fractures:** scattered milky white hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline and prismatic calcite, clean contacts with the host rock, instant very fainted milky white cut, bluish-white fluorescence, **Shale** 3% in average and 6% in 2013-2016 m interval: dark grey to greenish-grey, non to abundant siltitic, blocky, medium indurated, occasionally slickenside surfaces, very scattered **Sandstone** thin stringers, light greenish-grey, quartz 90%, feldspar 2%, lithic grains 8%, mafic rocks traces, upper very fine to lower fine grained, well sorted, angular to subangular, quartz cement and matrix, tight, no shows.

2031-2045 m Limestone 99%: cream, mottled cream and brown, interbedded with medium brown and greyish-brown, non to very siliceous, non to slightly argillaceous when lighter colour to argillaceous when dark brown, occasionally xenomorphic unimodal subeuhedral dolomite 2%, fine disseminated plant fragments and organic matter in brown siliceous limestone, non fossiliferous, mudstone, structureless, low relief, **Calcite Healed Fractures 1-2%:** abundant milky white hypidiomorphic to

xenomorphic microcrystalline to medium grained equate shaped crystalline and prismatic calcite, clean contacts with the host rock, instant very fainted milky white cut, bluish-white fluorescence, white uncut fluorescence on 2% of rock.

2045-2065 m Limestone 97%:, medium brown slightly translucent in thin fragments, interbedded with secondary mottled cream and brown, very siliceous to very slightly siltitic when cream, non to slightly argillaceous when lighter colour to more argillaceous when dark brown, very scattered dolomitic, fine disseminated plant fragments and organic matter in brown siliceous limestone, non fossiliferous, mudstone, structureless, low relief, **Calcite Partially Healed Fractures 3%:** abundant sub-mm hair thin system to cm thin system unfilled with milky and locally translucent hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline and prismatic calcite, clean contacts with the host rock, mainly tight with thin partially open intervals, inferred fracture porosity, white uncut fluorescence on 8% of rock, instant very fainted milky white cut, bluish-white fluorescence.

2065-2075 m Limestone 95%:, medium brown slightly translucent in thin fragments, interbedded with secondary mottled cream and brown, very siliceous to very slightly siltitic when cream, non to slightly argillaceous when lighter colour to more argillaceous when dark brown, very scattered dolomitic, fine disseminated plant fragments and organic matter in brown siliceous limestone, non fossiliferous, mudstone, structureless, low relief, **Calcite Partially Healed Fractures 5%:** abundant sub-mm hair thin system to cm thin system unfilled with milky and locally translucent hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline and prismatic calcite, clean contacts with the host rock, mainly tight with thin partially open intervals, inferred fracture porosity, white uncut fluorescence on 8% of rock, instant very fainted milky white cut, bluish-white fluorescence.

2075-2096 m Limestone 92%:, medium to dark brown, interbedded with secondary mottled cream and brown, very siliceous to very slightly siltitic when cream, non to slightly argillaceous, fine disseminated organic matter and plant fragments in brown siliceous limestone, non fossiliferous, mudstone, structureless, low relief, **Calcite Healed Fractures 8%:** abundant sub-mm hair thin system to cm thin system unfilled with milky and locally translucent hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline and prismatic calcite, clean contacts with the host rock, mainly tight with thin partially open intervals, inferred fracture porosity, white uncut fluorescence on 6% of rock, instant very fainted milky white cut, bluish-white fluorescence.

2096-2110 m Limestone 97%:, medium to dark brown, locally interbedded with secondary cream and mottled cream and brown, very siliceous to very slightly siltitic when cream, non to slightly argillaceous and grading to calcitic shale 5-8% toward bottom, locally fine disseminated pyrite, fine disseminated organic matter and plant fragments in brown siliceous limestone, non fossiliferous, mudstone, structureless, low relief, **Calcite Healed Fractures 2-5%:** moderate abundant fractures unfilled with milky and locally translucent hypidiomorphic microcrystalline to medium and coarse grained equate shaped crystalline and prismatic calcite, scattered fibrous calcite, clean contacts with the host rock, mainly tight with scattered open intervals, inferred fracture porosity, white uncut fluorescence on 5% of rock, instant very fainted milky white cut, bluish-white fluorescence.

2110-2127 m Limestone 68%:, medium to dark brown, moderate to very siliceous cryptocrystalline matrix, non to slightly argillaceous and locally grading to calcitic shale 2-3%, locally fine disseminated

pyrite, fine disseminated organic matter and plant fragments, non fossiliferous, mudstone, structureless, low relief, tight, **Limestone 30%:**, cream, mottled cream and light brown, very slightly siltitic, cryptocrystalline to very fine crystalline, locally fine disseminated pyrite, traces of organic matter and plant fragments, very scattered spicules, mudstone to scattered wackestone, low relief, tight **Calcite Healed Fractures 2%:** moderate abundant sub-mm to mm fractures and veins system in both limestone types, infill with milky, locally translucent and very light cream, hypidiomorphic microcrystalline to medium and coarse grained equate locally crystalline and prismatic calcite, locally fibrous calcite, clean contacts with the host rock, tight, white uncut fluorescence on 5% of rock, instant very fainted milky white cut, bluish-white fluorescence.

2127-2143 m Limestone 74%:, medium to dark brown, moderate siliceous cryptocrystalline matrix, very slightly argillaceous, scattered fine disseminated pyrite, locally pyrite nodules, fine disseminated organic matter and plant fragments, non fossiliferous, mudstone, structureless, low relief, tight, **Limestone 25%:**, cream, mottled cream and light brown, very slightly siltitic, cryptocrystalline to very fine crystalline, locally fine disseminated pyrite, traces of organic matter and plant fragments on thin parallel beddings, mudstone to scattered wackestone, low relief, tight **Calcite Healed Fractures 1-2%:** scattered sub-mm to mm fractures and veins system in both limestone types, infill with milky, locally translucent and very light cream, hypidiomorphic microcrystalline to medium and coarse grained equate locally crystalline and prismatic calcite, locally fibrous calcite, clean contacts with the host rock, tight, white uncut fluorescence on 5% of rock, instant very fainted milky white cut, bluish-white fluorescence.

2143-2159 m Limestone 67%:, medium to dark brown, moderate siliceous cryptocrystalline matrix, very slightly argillaceous, scattered fine disseminated pyrite, locally pyrite nodules, fine disseminated organic matter and plant fragments, non fossiliferous, mudstone, structureless, low relief, tight, **Limestone 30%:**, cream, mottled cream and light brown, very slightly siltitic, cryptocrystalline to very fine crystalline, locally fine disseminated pyrite, traces of organic matter and plant fragments on thin parallel beddings, mudstone to scattered wackestone, low relief, tight **Calcite Open Fractures 3%:** abundant mm to cm fractures and veins system in both limestone types, infill with milky, locally translucent and very light cream, hypidiomorphic microcrystalline to medium and coarse grained equate locally crystalline and prismatic calcite, locally fibrous calcite, clean contacts with the host rock, fracture porosity, white uncut fluorescence on 3-5% of rock, instant milky white cut, straw fluorescence.

2159-2172 m Limestone 76%:, medium to dark brown, moderate siliceous cryptocrystalline matrix, slightly argillaceous, scattered fine disseminated pyrite, locally pyrite nodules, fine disseminated organic matter and plant fragments, non fossiliferous, mudstone, structureless, low relief, tight, **Limestone 22%:**, cream, mottled cream and light brown, very slightly siltitic, cryptocrystalline to very fine crystalline, locally fine disseminated pyrite, traces of organic matter and plant fragments, mudstone to scattered wackestone, low relief, tight **Calcite Healed Fractures 1-2%:** abundant sub-mm to mm fractures and veins system in both limestone types, infill with milky, locally translucent and very light cream, hypidiomorphic microcrystalline to medium and coarse grained equate locally prismatic calcite, clean contacts with the host rock, tight, white uncut fluorescence on 2% of rock, slow very fainted milky white cut, bluish-white fluorescence, **Shale** traces greenish-grey, non to slightly siltitic, blocky, medium indurated, **Siltstone** thin stringers, light greenish-grey, lower very fine grained, well sorted, angular to subangular, quartz cement and matrix, tight, no shows.

2172-2185 m Limestone 75%:, medium to dark brown, moderate siliceous cryptocrystalline matrix, slightly argillaceous, scattered fine disseminated pyrite, locally pyrite nodules, fine disseminated organic matter and plant fragments, non fossiliferous, mudstone, structureless, low relief, tight, **Limestone 22%:**, cream, mottled cream and light brown, very slightly siltitic, cryptocrystalline to very fine crystalline, locally fine disseminated pyrite, traces of organic matter and plant fragments, mudstone to scattered wackestone, low relief, tight **Calcite Healed Fractures 3%:** abundant sub-mm to mm fractures and veins system in both limestone types, infill with milky, locally translucent and very light cream, hypidiomorphic microcrystalline to medium and coarse grained equate locally prismatic calcite, clean contacts with the host rock, tight, white uncut fluorescence on 2% of rock, slow very fainted milky white cut, bluish-white fluorescence, **Siltstone** thin stringers, light greenish-grey, lower very fine grained grading locally to fine grained sandstone, well sorted, angular to subangular, quartz cement and matrix, tight, no shows.

2185-2200 m Limestone 67%:, medium to dark brown, moderate siliceous cryptocrystalline matrix, very slightly argillaceous, scattered fine disseminated pyrite, locally pyrite nodules, fine disseminated organic matter and plant fragments, non fossiliferous, mudstone, structureless, low relief, tight, **Limestone 30%:**, cream, mottled cream and light brown, very slightly siltitic, cryptocrystalline to very fine crystalline, locally fine disseminated pyrite, traces of organic matter and plant fragments on thin parallel beddings, mudstone to scattered wackestone, low relief, tight **Calcite Open Fractures 3%:** abundant mm to cm fractures and veins system in both limestone types, infill with milky, locally translucent and very light cream, hypidiomorphic microcrystalline to medium and coarse grained equate locally crystalline and prismatic calcite, locally fibrous calcite, clean contacts with the host rock, fracture porosity in 2185-2190 m interval and tight toward bottom, white uncut fluorescence on 2-3% of rock, instant milky white cut, bluish-white fluorescence.

2200-2214 m Limestone 80%: medium to dark brown, moderate siliceous cryptocrystalline matrix, slightly dolomitic, slightly to abundant argillaceous, scattered fine disseminated pyrite, locally pyrite nodules, fine disseminated organic matter and plant fragments, non fossiliferous, mudstone, structureless, low relief, tight, **Limestone 18%:**, cream and mottled cream and light brown, very slightly siltitic and locally slightly argillaceous, cryptocrystalline to very fine crystalline, mudstone, low relief, tight **Calcite Open Fractures 2%:** abundant mm to cm fractures and veins system in both limestone types, infill with milky, locally translucent and very light cream, hypidiomorphic microcrystalline to medium and coarse grained equate locally crystalline and prismatic calcite, scattered fibrous calcite, clean contacts with the host rock, fracture porosity in 2207-2211.5 m interval, white uncut fluorescence on 2% of rock, very scattered light brown oil stain, instant milky white cut with locally streaming from calcite, bluish-white fluorescence.

2214-2233 m Limestone 95%: medium to dark brown and grey-brown, moderate siliceous cryptocrystalline matrix, slightly dolomitic, slightly to abundant argillaceous, locally abundant fine disseminated pyrite and pyrite nodules, fine disseminated organic matter and plant fragments, non fossiliferous, mudstone, structureless, low relief, tight, **Limestone 5%:**, cream and mottled cream and light brown, very slightly siltitic and locally slightly argillaceous, cryptocrystalline to very fine crystalline, mudstone, low relief, tight **Calcite Healed / Partially Open Fractures <1%:** scattered veins, infill with very light cream, scattered milky, locally translucent, hypidiomorphic microcrystalline to medium and

coarse grained equate locally crystalline and prismatic calcite, scattered fibrous calcite, clean contacts with the host rock, white uncut fluorescence on 1% of rock, instant weak milky white cut, bluish-white fluorescence.

2233-2246 m Limestone 95%: medium brown and secondary grey-brown, slightly to moderate siliceous cryptocrystalline matrix, slightly dolomitic in part, slightly to abundant argillaceous, locally abundant fine disseminated pyrite and pyrite nodules, fine disseminated organic matter and plant fragments, non fossiliferous, cryptocrystalline to rare microcrystalline and scattered large crystalline mudstone, structureless, low relief, tight, **Limestone 5%:**, cream and mottled cream and light brown, very slightly siltitic and locally slightly argillaceous, cryptocrystalline to very fine crystalline, mudstone, low relief, tight, scattered **Calcite Veins**, infill with very light cream, scattered milky calcite, traces white uncut fluorescence, instant weak milky white cut, bluish-white fluorescence.

2246-2259 m Limestone 95%: light to medium brown grading locally to cream and mottled in part cream and brown, moderate siliceous grading to cherty limestone, cryptocrystalline silica matrix with calcite and locally dolomite grains, non to very slightly argillaceous, very scattered pyrite nodules, non to scattered fine disseminated organic matter and plant fragments, non fossiliferous, cryptocrystalline to rare microcrystalline, structureless, low relief, tight, with abundant **Calcite Healed Fractures and Veins 5%:** hear thin to cm infill with very light cream, scattered milky, locally translucent, hypidiomorphic microcrystalline to medium and coarse grained equate locally crystalline and prismatic calcite, clean contacts with the host rock, traces of white uncut fluorescence, instant weak milky white cut, bluish-white fluorescence.

2259-2272 m Limestone 98%: light to medium brown grading locally to cream and mottled in part cream and brown, moderate siliceous grading to cherty limestone, cryptocrystalline silica matrix with calcite and locally dolomite grains, non to slightly argillaceous, very scattered pyrite nodules, non to scattered fine disseminated organic matter and plant fragments, non fossiliferous, cryptocrystalline to rare microcrystalline, structureless, low relief, tight, with abundant **Calcite Partially Healed Fractures and Veins 2%:** hear thin to cm infill with very light cream, scattered milky, locally translucent, hypidiomorphic microcrystalline to medium and coarse grained equate locally crystalline and prismatic calcite, clean contacts with the host rock, traces of white uncut fluorescence, instant weak milky white cut, bluish-white fluorescence.

2272-2273.6 m Brecciaed Limestone 99%: light to medium and abundant dark brown grading, moderate siliceous grading to cherty limestone, cryptocrystalline mudstone, brecciaed and cemented with calcite, **Shale 1%:** black, blocky, waxy, with slickenside surfaces.

Grès de Gaspé (?) Fm 2273.6 mMD, 2048.2 mTVD, -2009.9 mSS, 694.4 m VS

2273.6-2289 m Sandstone 98%: off white, translucent to abundant clear and locally frosted quartz 95%, lithic grains 2-4%, traces feldspar, glauconite and jasper traces, occasionally pyrite nodules and scattered in cements, upper medium to upper coarse with elements of very coarse and shredded micro-conglomerate fragments, angular to rare subrounded, poor sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 98% and replacement dolomite 2% and locally pyrite cement, low with scattered medium relief thin layers, poor interparticulate porosity 5% in thin layers,

instant slow developing milky white cut, bluish-white fluorescence, **Shale 2%:** black, blocky, locally waxy, slightly abundant to very abundant dark brown to black organic matter, with slickenside surfaces.

2289-2297 m Sandstone 100%: off white and very light grey interbedded with light grey, translucent to transparent and frosted quartz 88-94%, white feldspar 2-3%, lithic grains 2-8%, traces glauconite, jasper traces, occasionally pyrite nodules and scattered in cements, lower medium to lower coarse, angular to rare subrounded, well to medium sorted, quartz overgrowth infill pores, quartz cement and matrix 95% and dolomite 5% and scattered pyrite cement, locally thin layers with black organic matter imbedded in sandstone and in adjacent pores, low to scattered medium relief thin layers, poor interparticulate porosity 7-8% in thin layers, instant slow developing milky white cut, bluish-white fluorescence.

2297-2315 m Sandstone 100%: off white, translucent to abundant clear and locally frosted quartz 95%, lithic grains 2%, traces feldspar, traces pyrite nodules, upper fine to upper medium, angular to rare subrounded, moderate sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 97% and replacement dolomite 3% and locally pyrite cement, low with scattered medium relief, loose grains 75-80%, poor to locally fair interparticulate porosity 5-10%, scattered organic matter in pores and coating thin fractures, very weak slow developing milky white cut, bluish-white fluorescence, very thin black **Shale** stringers.

2315-2321 m Sandstone 99%: off white, translucent to abundant clear and locally frosted quartz 95%, lithic grains 2%, traces feldspar, traces pyrite nodules, lower to upper medium and traces of lower coarse, angular to rare subrounded, moderate sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 97% and replacement dolomite 3% and locally pyrite cement, low with scattered medium relief, loose grains 75-80%, poor to locally fair interparticulate porosity 8%, scattered organic matter in pores and coating thin fractures, weak instant milky white cut, bluish-white fluorescence, **Shale 1%:** black, blocky, slightly abundant dark brown to black organic matter.

2321-2330 m Sandstone 99%: off white, translucent, abundant clear and locally frosted quartz 97%, lithic grains 1%, traces feldspar, traces pyrite nodules, lower to upper medium and traces of lower coarse with shredded lower very coarse elements from micro-conglomerate and/or quartz veins, angular to rare subrounded, moderate sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 92% and replacement dolomite 3% and calcitic cement 5%, low with scattered medium relief, poor to fair interparticulate porosity 5-12%, scattered organic matter in pores and coating thin fractures, weak oil flow over shakers, fainted oil smell, very pale brown locally oil stain, instant milky white cut, straw fluorescence, **Shale <1%:** black, blocky, slightly abundant dark brown to black organic matter, soft.

2330-2346 m Sandstone 100%: off white, translucent, abundant clear and locally frosted quartz 97%, lithic grains 1%, traces feldspar, traces pyrite nodules, lower to upper medium and traces of lower coarse with shredded lower very coarse elements from micro-conglomerate and/or quartz veins, angular to rare subrounded, moderate sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 92% and replacement dolomite 3% and calcitic cement 5%, low with scattered medium relief, poor to fair interparticulate porosity 5%, instant milky white cut, straw fluorescence.

2346-2357 m Sandstone 100%: very light grey, translucent, abundant clear and locally frosted quartz 92-97%, lithic grains 3-8%, traces feldspar, lower to upper medium and traces of lower coarse with shredded lower very coarse elements from micro-conglomerate and/or quartz veins, angular to rare subrounded, moderate sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 92% and replacement dolomite 3% and calcitic cement and fragments from veins 1%, rich in organic matter shale locally infill pores and small fractures, low with scattered medium relief, poor to fair interparticulate porosity, no shows.

2357-2367 m Siltitic Shale 45%: medium grey and grey brown grading to dark brown-dark grey, blocky, slightly to abundant siltitic, medium indurated grading locally to **Argillaceous Siltstone 15%,** interbedded with medium to dark grey **Shale 30%:** blocky with abundant hear thin darker layers, rare slickenside surfaces, **Cherty Limestone 1-2%:** medium brown siliceous mudstone, **Lithic Conglomerate 1-2%** fragments, **Sandstone 5%:** light grey, translucent, and frosted quartz 85-90%, lithic grains 10-15%, traces feldspar, lower fine to upper medium and traces of lower coarse with elements from micro-conglomerate, angular to rare subrounded and rounded, moderate to poor sorted, quartz overgrowth, quartz cement and matrix 95% and replacement dolomite 4% and calcitic cement and fragments from veins 1%, tight, no shows.

2367-2385 m Dolomitic Sandstone 100%: off white to light grey, clear translucent and frosted quartz 90%, lithic grains 10%, traces feldspar, traces glauconite and reddish quartzite fragments, scattered pyrite, upper fine to upper medium and traces of lower coarse with shredded lower very coarse elements from quartz veins, angular to rare subrounded, moderate to poor sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 85-90% with dolomite 5-8% and calcitic cement 5%, occasionally organic material and black bitumen locally carbonaceous shales in very thin lenses and large pores space, low with scattered medium relief, poor to fair interparticulate porosity 3-5%, instant fainted milky white cut with locally strong, bluish-white fluorescence.

2385-2397 m Dolomitic Sandstone 100%: off white to light grey, clear translucent and frosted quartz 95%, lithic grains 5%, traces feldspar, traces glauconite and reddish quartzite fragments, scattered pyrite, upper fine to upper medium and traces of lower coarse with shredded lower very coarse elements from quartz veins, angular to rare subrounded, moderate to poor sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 85-90% with dolomite 5-8% and calcitic cement 5%, occasionally organic material and black bitumen locally carbonaceous shales in very thin lenses and large pores space, low with scattered medium relief, tight, no shows.

2397-2400 m Dolomitic Sandstone 75%: off white to light grey, clear translucent and frosted quartz 90%, lithic grains 10%, traces feldspar, traces glauconite and reddish quartzite fragments, scattered pyrite, upper fine to upper medium and traces of lower coarse with shredded lower very coarse elements from quartz veins, angular to rare subrounded, moderate to poor sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 85-90% with dolomite 5-8% and calcitic cement 5%, occasionally organic material and black bitumen locally carbonaceous shales in very thin lenses and large pores space, low with scattered medium relief, tight, no shows, **Quartz Open Fracture 25%:** (2399-2400 m) fracture zone partially infilled with clear and translucent anhedral to euhedral locally pyramidal quartz with light brown oil stain, oil flowing over the shaker, bluish-white

uncut fluorescence in unwashed spot sample, oil iridescence in wash water, oil smell, instant streaming milky white cut, bluish-white fluorescence.

2400-2412 m Dolomitic Sandstone 80%: off white to light grey, clear translucent and frosted quartz 90%, lithic grains 10%, traces feldspar, traces glauconite and reddish quartzite fragments, scattered pyrite, upper fine to upper medium and traces of lower coarse, angular to rare subrounded, moderate to poor sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 85% with dolomite 10% and calcitic cement 5%, low relief, tight, no shows, interbedded with thin **Dolomite 2-5%:** light to medium brown, very fine crystalline to cryptocrystalline mudstone, argillaceous in part, grading locally to **Calcitic Dolomite, Argillaceous Siltstone 8-10%:** medium grey, lower very fine grained with calcite and argillaceous cement, tight, Scattered Siltitic Shale: medium grey, slightly to very siltitic, micromicaceous, medium indurated, and rare green shale thin lenses, Thin light to medium brown cryptocrystalline mudstone **Limestone 1-2%.**

2412-2431 m Dolomitic Sandstone 100%: off white to light grey and grey-brownish in part, clear translucent and frosted quartz 92%, lithic grains 8%, traces feldspar, traces glauconite, scattered pyrite nodules, micromicaceous in part, upper very fine to upper fine and traces of lower medium, angular to rare subrounded, moderate sorted, abundant clear quartz overgrowth infill pores, dolomite and secondary quartz cement, non to frequent interbeds with abundant organic material – plant fragments - and black bitumen in very thin lenses and pores space, low with scattered medium relief, tight, no shows

2431-2434 m Siltitic Shale 50%: medium grey to grey-brownish in part, siltitic grading locally to siltitic shale, micromicaceous, non to scattered slightly dolomitic, blocky, medium indurated, **Dolomitic Sandstone 42%:** off white to light grey and grey-brownish in part, clear translucent and frosted quartz 92%, lithic grains 8%, traces feldspar, traces glauconite, scattered pyrite nodules, micromicaceous in part, upper very fine to upper fine and traces of lower medium, angular to rare subrounded, moderate sorted, abundant clear quartz overgrowth infill pores, dolomite and secondary quartz cement, non to frequent interbeds with abundant organic material – plant fragments - and black bitumen in very thin lenses and pores space, low with scattered medium relief, tight, no shows, **Siltitic Dolomite 8%:** light brown, cryptocrystalline to very very fine crystalline mudstone, siltitic, massive, tight, traces of **Dolomite Healed Fracture:** transparent very light brown euhedral to sub-euhedral dolomite with intercrystalline porosity infilled with organic matter, tight, no shows.

TD: 2434.0 mMD, 2178.8 mTVD, -2140.5 mSS, 771.8 m N, 0.8 m E, 771.8 m VS

ANNEXE 2

RAPPORTS JOURNALIERS DE FORAGE

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 16-Oct-09 **Day:** PS1

Measured Depth (mMD/KB): _____ m **Vertical Depth (mTVD/KB):** _____ m **Progress:** _____ m

Drilling Hours: _____ Drill Rate: _____ m/hr **Rig:** Savanna # 635 **Project TD:** _____

0800 hrs Operation: Move rental equipment to Tarpoint location with Foraction. **Weather:** Cloudy -1 deg C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	140/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES:

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight		TOOL	OD	ID	LENGTH
			Viscosity					
			Plastic Viscosity					
			Yield Point					
			Gel Strengths					
			pH					
			Water Loss					
			Filter Cake					
			Chlorides					
			Solids					
			K + mg/l					
			KCL mg/l					
			Daily Cost:					
			Cum. Cost:				TOTAL	

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	
Rig Service		Fishing		Wodaylight	12.00	Reaming	
Tripping		Logging		Nipple down		Slip & Cut	
Survey		Coring		DST		Level sub	
Circ./Cond.		Handle Tools		Repair		Install wear bushing	
Pick up BHA		Run Casing		Rig down		Move rig	12.00

24 HOUR OPERATIONS

00:00	07:00	Wait on daylight.
07:00	19:00	Transport rental equipment from Haldimand location to Tarpoint location with Foraction trucks.
		Floc tank, 3 wellsite trailers, 2 shale bins, some mud products.
19:00	00:00	Wait on daylight.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** _____ **Size:** _____ **Rating:** _____ **kPa**

CASING SUMMARY

Ran _____ Jts of _____ mm, _____ kg/m, _____ _____ casing.

Landed at _____ mKB. Total length _____ meters. Marker Jt Intv. _____ mKB

Cemented with _____

Plug down at _____ hrs. On _____ with _____ m3 cement returns.

HSE:	Exposure:	1	Man Hours:	0	Cumulative per Well:	0	Supply Trips to Rig:	0 Km Driven:	Incidents: 0
POB:	Savanna:	6	Service Comp.:		Pétrolia/Codeco:		Cumulative:		
Drilling Water (m3):			Available at Rig Site:		Daily Consumption:		Daily Delivery:	Total Consumption:	
Potable Water (m3):			Available at Rig Site:		Daily Consumption:		Daily Delivery:	Total Consumption:	
Fuel:			Available at Rig Site:		Daily Consumption:		Daily delivery : 0	Total Consumption:	

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: _____ CF Elev: _____ GL Elev: 33.34

Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: _____ Rig Released: _____ Well Licence : 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 17-Oct-09 **Day:** PS2
Measured Depth (mMD/KB): ____ m **Vertical Depth (mTVD/KB):** ____ m **Progress:** ____ m
Drilling Hours: ____ Drill Rate: ____ m/hr **Rig:** Savanna # 635 **Project TD:** ____
0800 hrs Operation: Move tubulars to Tarpoint location. **Weather:** Cloudy -2 deg C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	140/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES:

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight		TOOL	OD	ID	LENGTH
			Viscosity					
			Plastic Viscosity					
			Yield Point					
			Gel Strengths					
			pH					
			Water Loss					
			Filter Cake					
			Chlorides					
			Solids					
			K + mg/l					
			KCL mg/l					
			Daily Cost:					
			Cum. Cost:				TOTAL	

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	
Rig Service		Fishing		Wodaylight	12.00	Reaming	
Tripping		Logging		Nipple down		Slip & Cut	
Survey		Coring		DST		Level sub	
Circ./Cond.		Handle Tools		Repair		Install wear bushing	
Pick up BHA		Run Casing		Rig down		Move rig	12.00

24 HOUR OPERATIONS

00:00	07:00	Wait on daylight.
07:00	19:00	Transport rental equipment from Haldimand location to Tarpoint location with Foraction trucks.
		Wellsite trailer, diverter skid, flare tank, directional tools, rental equipment, mud products and tubulars.
19:00	00:00	Wait on daylight.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** ____ **Size:** ____ **Rating:** ____ **kPa**

CASING SUMMARY

Ran ____ Jts of ____ mm, ____ kg/m, ____ ____ casing.
Landed at ____ mKB. Total length ____ meters. Marker Jt Intv. ____ mKB
Cemented with ____
Plug down at ____ hrs. On ____ with ____ m3 cement returns.

HSE:	Exposure:	1	Man Hours:	0	Cumulative per Well:	0	Supply Trips to Rig:	0 Km Driven:	Incidents: 0
POB:	Savanna:	6	Service Comp.:		Pétrolia/Codeco:		Cumulative:		
Drilling Water (m3):			Available at Rig Site:		Daily Consumption:		Daily Delivery:	Total Consumption:	
Potable Water (m3):			Available at Rig Site:		Daily Consumption:		Daily Delivery:	Total Consumption:	
Fuel:			Available at Rig Site:		Daily Consumption:		Daily delivery : 0	Total Consumption:	

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: ____ CF Elev: ____ GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: ____ Rig Released: ____ Well Licence : 2009FC135

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DAILY DRILLING REPORT

CODECO CONSULTING (2000) INC.
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 18-Oct-09 **Day:** PS3
Measured Depth (mMD/KB): _____ m **Vertical Depth (mTVD/KB):** _____ m **Progress:** _____ m
Drilling Hours: _____ Drill Rate: _____ m/hr **Rig:** Savanna # 635 **Project TD:** _____
0800 hrs Operation: Rig move. **Weather:** Overcast, light rain 2 deg C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	140/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES:

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight		TOOL	OD	ID	LENGTH
			Viscosity					
			Plastic Viscosity					
			Yield Point					
			Gel Strengths					
			pH					
			Water Loss					
			Filter Cake					
			Chlorides					
			Solids					
			K + mg/l					
			KCL mg/l					
			Daily Cost:					
			Cum. Cost:				TOTAL	

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	
Rig Service		Fishing		Wodaylight	12.00	Reaming	
Tripping		Logging		Nipple down		Slip & Cut	
Survey		Coring		DST		Level sub	
Circ /Cond.		Handle Tools		Repair		Install wear bushing	
Pick up BHA		Run Casing		Rig down		Move rig	12.00

24 HOUR OPERATIONS

00:00	08:00	Wait on daylight.
08:00	12:00	Load and transport miscellaneous load from Haldimand location to Tarpoint location with Foraction truck.
		Off load casing and flare tank at Tarpoint loaction from second truck. Load wellsite trailer and spot same. Release both Foraction trucks.
12:00	14:00	Meeting with truck supervisors, constuction foreman at Tarpoint location. Check on Haldimand location.
		Total trucks-2 Foraction trucks released at 12:00 hrs.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** _____ **Size:** _____ **Rating:** _____ kPa

CASING SUMMARY

Ran _____ Jts of _____ mm, _____ kg/m, _____ _____ casing.
Landed at _____ mKB. Total length _____ meters. Marker Jt Intv. _____ mKB
Cemented with _____
Plug down at _____ hrs. On _____ with _____ m3 cement returns.

HSE:	Exposure:	3	Man Hours:	160	Cumulative per Well:	468	Supply Trips to Rig: 5		9000 Km Driven:		Incidents: 0
POB:	Savanna:	6	Service Comp.:	7	Pétrolia/Codeco: 2		Cumulative: 15				
Drilling Water (m3):		0	Available at Rig Site:	0	Daily Consumption:	0	Daily Delivery:	0	Total Consumption:		0
Potable Water (m3):		0	Available at Rig Site:	0	Daily Consumption:	0	Daily Delivery:	0	Total Consumption:		0
Fuel:			Available at Rig Site:		Daily Consumption:		Daily delivery : 0		Total Consumption:		

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: _____ CF Elev: _____ GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: _____ Rig Released: _____ Well Licence: 2009FC135

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DAILY DRILLING REPORT

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Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 19-Oct-09 **Day:** PS4
Measured Depth (mMD/KB): ____ m **Vertical Depth (mTVD/KB):** ____ m **Progress:** ____ m
Drilling Hours: ____ Drill Rate: ____ m/hr **Rig:** Savanna # 635 **Project TD:** ____
0800 hrs Operation: Rig move. **Weather:** Cloudy, -4 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	140/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES:

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight		TOOL	OD	ID	LENGTH
			Viscosity					
			Plastic Viscosity					
			Yield Point					
			Gel Strengths					
			pH					
			Water Loss					
			Filter Cake					
			Chlorides					
			Solids					
			K + mg/l					
			KCL mg/l					
			Daily Cost:					
			Cum. Cost:				TOTAL	

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	
Rig Service		Fishing		Wodaylight	12.00	Reaming	
Tripping		Logging		Nipple down		Slip & Cut	
Survey		Coring		DST		Level sub	
Circ./Cond.		Handle Tools		Repair		Install wear bushing	
Pick up BHA		Run Casing		Rig down		Move rig	12.00

24 HOUR OPERATIONS

00:00	07:00	Wait on daylight.
07:00	07:15	Safety meeting.
07:15	19:00	Pull rig apart with VDM bed truck. Transport 4 loads to Tar Point location with VDM trucks (2 loads of mats, catwalk and 1 pipe tub).
		Load derrick on VDM truck at 1500 hours, wait on daylight.
19:00	00:00	Meeting with truck supervisors, construction foreman and rig manager. Wait on daylight.
		Total trucks: 2 VDM tractor trailers, 1 VDM bed truck, 2 Guay cranes.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** ____ **Size:** ____ **Rating:** ____ **kPa**

CASING SUMMARY

Ran ____ Jts of ____ mm, ____ kg/m, ____ ____ casing.
Landed at ____ mKB. Total length ____ meters. Marker Jt Intv. ____ mKB
Cemented with ____
Plug down at ____ hrs. On ____ with ____ m3 cement returns.

HSE:	Exposure:	4	Man Hours:	180	Cumulative per Well:	648	Supply Trips to Rig: 6		9500 Km Driven:		Incidents: 0		
POB:	Savanna:	6	Service Comp.:	7	Pétrolia/Codeco: 2		Cumulative: 15						
Drilling Water (m3):		0	Available at Rig Site:	0	Daily Consumption:	0	Daily Delivery:	0	Total Consumption:	0			
Potable Water (m3):		0	Available at Rig Site:	0	Daily Consumption:	0	Daily Delivery:	0	Total Consumption:	0			
Fuel:			Available at Rig Site:		Daily Consumption:		Daily delivery : 0		Total Consumption:				

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: ____ CF Elev: ____ GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: ____ Rig Released: ____ Well Licence : 2009FC135

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DAILY DRILLING REPORT

CODECO CONSULTING 2000 INC.
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 20-Oct-09 **Day:** PS5
Measured Depth (mMD/KB): _____ m **Vertical Depth (mTVD/KB):** _____ m **Progress:** _____ m
Drilling Hours: _____ Drill Rate: _____ m/hr **Rig:** Savanna # 635 **Project TD:** _____
0800 hrs Operation: Rig move. **Weather:** Cloudy, 1 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	140/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES:

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight		TOOL	OD	ID	LENGTH
			Viscosity					
			Plastic Viscosity					
			Yield Point					
			Gel Strengths					
			pH					
			Water Loss					
			Filter Cake					
			Chlorides					
			Solids					
			K + mg/l					
			KCL mg/l					
			Daily Cost:					
			Cum. Cost:				TOTAL	

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	
Rig Service		Fishing		Wodaylight	13.00	Reaming	
Tripping		Logging		Nipple down		Slip & Cut	
Survey		Coring		DST		Level sub	
Circ./Cond.		Handle Tools		Repair		Install wear bushing	
Pick up BHA		Run Casing		Rig down		Move rig	11.00

24 HOUR OPERATIONS

00:00	07:00	Wait on daylight.
07:00	07:15	Safety meeting.
07:15	18:00	Transport derrick, boiler and 1 load of mats to Tar Point location.
		Transport sub and mud tank to staging area. Load trailers on Haldimand site (generator, pump and combo building).
18:00	00:00	Meeting with truck supervisors and rig manager. Wait on daylight.
		Total trucks: 2 VDM tractor trailers, 1 VDM bed truck, 4 Bellmare tractors with 8 trailers, 2 Guay cranes.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** _____ **Size:** _____ **Rating:** _____ **kPa**

CASING SUMMARY

Ran _____ Jts of _____ mm, _____ kg/m, _____ _____ casing.
Landed at _____ mKB. Total length _____ meters. Marker Jt Intv. _____ mKB
Cemented with _____
Plug down at _____ hrs. On _____ with _____ m3 cement returns.

HSE:	Exposure:	5	Man Hours:	253	Cumulative per Well:	901	Supply Trips to Rig: 6	5400 Km Driven:	Incidents: 0		
POB:	Savanna:	6	Service Comp.:	15	Pétrolia/Codeco: 2		Cumulative: 23				
Drilling Water (m3):		0	Available at Rig Site:	0	Daily Consumption:	0	Daily Delivery:	0	Total Consumption:	0	
Potable Water (m3):		0	Available at Rig Site:	0	Daily Consumption:	0	Daily Delivery:	0	Total Consumption:	0	
Fuel:			Available at Rig Site:		Daily Consumption:		Daily delivery : 0		Total Consumption:		

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: _____ CF Elev: _____ GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: _____ Rig Released: _____ Well Licence : 2009FC135

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DAILY DRILLING REPORT

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Calgary, Alberta T2G 3A4
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Well Name: Pétrolia, Tarpoint N°1 **Date:** 21-Oct-09 **Day:** PS6

Measured Depth (mMD/KB): _____ m **Vertical Depth (mTVD/KB):** _____ m **Progress:** _____ m

Drilling Hours: _____ Drill Rate: _____ m/hr **Rig:** Savanna # 635 **Project TD:** _____

0800 hrs Operation: Spot catwalk and pipe tubs with VDM bed truck. **Weather:** Cloudy, 2 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	140/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES:

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight		TOOL	OD	ID	LENGTH
			Viscosity					
			Plastic Viscosity					
			Yield Point					
			Gel Strengths					
			pH					
			Water Loss					
			Filter Cake					
			Chlorides					
			Solids					
			K + mg/l					
			KCL mg/l					
			Daily Cost:					
			Cum. Cost:				TOTAL	

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	
Rig Service		Fishing		Wodaylight	12.00	Reaming	
Tripping		Logging		Nipple down		Slip & Cut	
Survey		Coring		DST		Level sub	
Circ./Cond.		Handle Tools		Repair		Install wear bushing	
Pick up BHA		Run Casing		Rig down		Move rig	12.00

24 HOUR OPERATIONS

00:00	07:00	Wait on daylight.
07:00	07:15	Safety meeting.
07:15	19:00	Move rig from Haldimand location to Tar Point location with VDM and Bellmare trucks. Spot rig. Cranes released at 1800 hours.
19:00	00:00	Wait on daylight.
		Total trucks: 2 VDM tractor trailers, 1 VDM bed truck, 4 Bellmare tractors with 8 trailers, 2 Guay cranes.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** _____ **Size:** _____ **Rating:** _____ **kPa**

CASING SUMMARY

Ran _____ Jts of _____ mm, _____ kg/m, _____ _____ casing.

Landed at _____ mKB. Total length _____ meters. Marker Jt Intv. _____ mKB

Cemented with _____

Plug down at _____ hrs. On _____ with _____ m3 cement returns.

HSE:	Exposure:	6	Man Hours:	396	Cumulative per Well:	1297	Supply Trips to Rig: 30	6400 Km Driven:		Incidents: 0	
POB:	Savanna:	6	Service Comp.:	25	Pétrolia/Codeco: 2		Cumulative: 33				
Drilling Water (m3):		0	Available at Rig Site:	70	Daily Consumption:	0	Daily Delivery:	0	Total Consumption:		0
Potable Water (m3):		2	Available at Rig Site:	2	Daily Consumption:	0.5	Daily Delivery:	2	Total Consumption:		0.5
Fuel:			Available at Rig Site:		Daily Consumption:		Daily delivery : 0		Total Consumption:		

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: _____ CF Elev: _____ GL Elev: 33.34

Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: _____ Rig Released: _____ Well Licence : 2009FC135

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DAILY DRILLING REPORT

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Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 22-Oct-09 **Day:** PS7
Measured Depth (mMD/KB): ____ m **Vertical Depth (mTVD/KB):** ____ m **Progress:** ____ m
Drilling Hours: ____ Drill Rate: ____ m/hr **Rig:** Savanna # 635 **Project TD:** ____
0800 hrs Operation: Rig to spud. **Weather:** Overcast, 0 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	140/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES:

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight		TOOL	OD	ID	LENGTH
			Viscosity					
			Plastic Viscosity					
			Yield Point					
			Gel Strengths					
			pH					
			Water Loss					
			Filter Cake					
			Chlorides					
			Solids					
			K + mg/l					
			KCL mg/l					
			Daily Cost:					
			Cum. Cost:				TOTAL	

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	
Rig Service		Fishing		Wodaylight	7.50	Reaming	
Tripping		Logging		Nipple up	3.00	Slip & Cut	
Survey		Coring		DST		Level sub	
Circ./Cond.		Handle Tools		Repair		Install wear bushing	
Pick up BHA		Run Casing		Rig up	9.50	Move rig	4.00

24 HOUR OPERATIONS

00:00	07:30	Wait on daylight.
07:30	08:00	Rig in power to wellsite trailers. Safety meeting.
08:00	12:00	Spot catwalk and pipe tubs with VDM trucking.
12:00	21:00	Rig up. Raise derrick at 1430 hours.
21:00	00:00	Nipple up surface diverter.
		Total trucks: 1 VDM bed truck, 1 tractor trailer backhaul 4 3/4 drill collars and DH tools.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** ____ **Size:** ____ **Rating:** ____ **kPa**

CASING SUMMARY

Ran ____ Jts of ____ mm, ____ kg/m, ____ ____ casing.
Landed at ____ mKB. Total length ____ meters. Marker Jt Intv. ____ mKB
Cemented with ____
Plug down at ____ hrs. On ____ with ____ m3 cement returns.

HSE:	Exposure:	7	Man Hours:	288	Cumulative per Well:	1585	Supply Trips to Rig: 31	6600	Km Driven:	Incidents: 0	
POB:	Savanna:	11	Service Comp.:	7	Pétrolia/Codeco: 7		Cumulative: 24				
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	0	Daily Delivery:	70	Total Consumption:	0	
Potable Water (m3):		2	Available at Rig Site:	1	Daily Consumption:	0.5	Daily Delivery:	0	Total Consumption:	1	
Fuel:	13174		Available at Rig Site:	13174	Daily Consumption:	1000	Daily delivery :	13174	Total Consumption:	1000	

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: ____ CF Elev: ____ GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: ____ Rig Released: ____ Well Licence : 2009FC135

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DAILY DRILLING REPORT

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Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 23-Oct-09 **Day:** 1
Measured Depth (mMD/KB): 73 m **Vertical Depth (mTVD/KB):** m **Progress:** 60 m
Drilling Hours: 8.50 Drill Rate: 7.00 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Drilling 311 mm hole at 103 m. **Weather:** Cloudy, -4 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
1A	311	EG1HGLC	L30935	13		60	8.50	6000	80	3 x 15.9	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1765	1740
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1000	1000
SPM	90	90	Flowrate (l/m)	800	800
Volume (m3/min)	1.05	1.05	Operating Hours	11	11

Pump Pressure: 3800 **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man, Soda Ash-1, Gel-50.

SURVEYS

Depth (mMD)	Inclination (deg)	Direction (deg)
20.00	0.85	
30.00	0.77	

MUD

Mud Weight	1005
Viscosity	32
Plastic Viscosity	
Yield Point	
Gel Strengths	
pH	8.0
Water Loss	
Filter Cake	
Chlorides	
Solids	
K + mg/l	
KCL mg/l	
Daily Cost:	2775
Cum. Cost:	2775

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
Bit	311.1		.35
Bit sub	204		.90
Drill collars	203	72	18.70
X/O	162	71	.81
Shock tool-SN-M6505502	163	72	2.81
Drill collars	167	68	37.68
Kelly down			11.75
		TOTAL	73

RIG TIME:

Drilling	8.50	Weld Bowl		Cement		Safety/BOP	0.75
Rig Service	0.50	Fishing		Wodaylight		Reaming	
Tripping		Logging		Nipple up		Slip & Cut	
Survey	1.25	Coring		DST		Level sub	
Circ./Cond.		Handle 203mm	2.25	Repair		Install wear bushing	
Pick up BHA		Run Casing		Rig up	10.75	Move rig	

24 HOUR OPERATIONS

00:00	07:00	Rig up.
07:00	07:15	Prespud safety meeting.
07:15	08:00	Make up BHA. Handle 203 mm drill collars.
08:00	11:00	Rig to spud.
11:00	11:45	Level substructure. Raise mud pump side 25 mm.
11:45	12:15	Prespud safety meeting.
12:15	13:00	Drill 311 mm hole from 13 - 24 m.
13:00	13:15	Rig service.
13:15	14:00	Handle 203 mm drill collars.
14:00	15:15	Drill 311 mm hole from 24 - 39 m.
15:15	16:00	Accumulated connection and survey time.
16:00	19:00	Drill 311 mm hole from 39 - 53 m.
19:00	19:30	Accumulated connection and survey time.
19:30	20:15	Trip out 2 drill collars, make up shock tool, run in hole.
20:15	20:30	Rig service. Function test HCR valve, 3 seconds to open/close.
20:30	00:00	Drill 311 mm hole from 53 - 73 m.
		Note: Encountered artesian well at 69 m. Gaining water at 3 m3/hr. Mud up system and increase density to 1050 kg/m3
		with drilling solids. Total water gained 10 m3.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** **Size:** **Rating:** **kPa**

CASING SUMMARY

Ran Jts of mm, kg/m, casing.
Landed at mKB. Total length meters. Marker Jt Intv. mKB
Cemented with
Plug down at hrs. On with m3 cement returns.

HSE:	Exposure:	8	Man Hours:	288	Cumulative per Well:	1585	Supply Trips to Rig: 31	6600 Km Driven:		Incidents: 0	
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	3	Cumulative: 18				
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	70	Daily Delivery:	0	Total Consumption:	70	
Potable Water (m3):		0	Available at Rig Site:	1	Daily Consumption:	1	Daily Delivery:	0	Total Consumption:	2	
Fuel:	13174		Available at Rig Site:	13174	Daily Consumption:	1000	Daily delivery :	13174	Total Consumption:	1000	

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 24-Oct-09 **Day:** 2
Measured Depth (mMD/KB): 165 m **Vertical Depth (mTVD/KB):** m **Progress:** 92 m
Drilling Hours: 20.50 Drill Rate: 4.48 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Drilling 311mm hole @ 193m **Weather:** Rain, 7 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
1A	311	EG1HGLC	L30935	13		152	29.00	6000	120	3 x 15.9	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1600	1600
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1035	1035
SPM	120	120	Flowrate (l/m)	800	800
Volume (m3/min)	1.4	1.4	Operating Hours	4	4

Pump Pressure: 9000 **Annular Velocity (m/min): 41** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-3, Soda Ash-1, Gel-63, Caustic-1, Sawdust-3.

SURVEYS

Depth (mMD)	Inclination (deg)	Direction (deg)
59.00	1.15	
89.00	1.39	
98.00	0.82	
118.00	0.95	
135.00	1.55	

MUD

Mud Weight	1050
Viscosity	42
Plastic Viscosity	10
Yield Point	4.5
Gel Strengths	5.0/8.0
pH	9.5
Water Loss	15.0
Filter Cake	2
Chlorides	2800
Solids	0.033
K + mg/l	
KCL mg/l	
Daily Cost:	4132
Cum. Cost:	6907

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
Bit	311.1		.35
Bit sub	204		.90
Drill collars	203	72	18.70
X/O	162	71	.81
Shock tool-SN-M6505502	163	72	2.81
Drill collars	167	68	131.48
Kelly down			9.95
		TOTAL	165

RIG TIME:

Drilling	20.50	Weld Bowl		Cement		Safety/BOP	0.25
Rig Service	0.75	Fishing		Wodaylight		Reaming	
Tripping		Logging		Nipple up		Slip & Cut	
Survey	2.50	Coring		DST		Level sub	
Circ./Cond.		Handle 203mm		Repair		Install wear bushing	
Pick up BHA		Run Casing		Rig up		Move rig	

24 HOUR OPERATIONS

00:00	00:15	Safety meeting.
00:15	07:00	Drill 311 mm hole from 73 - 103 m.
07:00	08:00	Accumulated connection and survey time.
08:00	08:30	Rig service. Inspect and adjust braking system.
08:30	15:30	Drill 311 mm hole from 103 - 122 m.
15:30	16:00	Accumulated connection and survey time.
16:00	16:15	Rig service. Function test annular, 7 seconds to close.
16:15	23:00	Drill 311 mm hole from 122 - 165 m.
23:00	00:00	Accumulated connection and survey time.
		Note: Total water gained from artesian well once under control 23 m3.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** **Size:** **Rating:** kPa

CASING SUMMARY

Ran Jts of mm, kg/m, casing.
Landed at mKB. Total length meters. Marker Jt Intv. mKB
Cemented with
Plug down at hrs. On with m3 cement returns.

HSE:	Exposure:	9	Man Hours:	216	Cumulative per Well:	1801	Supply Trips to Rig: 32	7800 Km Driven:		Incidents: 0	
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	3	Cumulative: 18				
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	5	Daily Delivery:	0	Total Consumption:		75
Potable Water (m3):		1.5	Available at Rig Site:	1.5	Daily Consumption:	0.5	Daily Delivery:	1.5	Total Consumption:		2.5
Fuel:		13174	Available at Rig Site:	8624	Daily Consumption:	3550	Daily delivery :	0	Total Consumption:		4550

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

PETROLIA
1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
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Fax: (418) 657-1880

DAILY DRILLING REPORT

CODECO CONSULTING ENGINEERS
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 25-Oct-09 **Day:** 3
Measured Depth (mMD/KB): 213 m **Vertical Depth (mTVD/KB):** m **Progress:** 48 m
Drilling Hours: 11.25 Drill Rate: 4.26 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Weld on casing bowl. **Weather:** Clear, 1 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
1A	311	EG1HGLC	L30935	13	168	155	29.75	6000	120	3 x 15.9	3-3-FC-A-E-0-No-Hrs
RR2A	311	EG1HGLC	L29324	168	213	45	10.50	6000	110	3 x 15.9	3-3-FC-A-E-0-No-TD

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1600	1600
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1085	1085
SPM	120	120	Flowrate (l/m)	800	800
Volume (m3/min)	1.4	1.4	Operating Hours	8	8

Pump Pressure: 10000 **Annular Velocity (m/min): 41** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, Lignite, Gel-31, Caustic-12.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1130	TOOL	OD	ID	LENGTH
154.00	2.00		Viscosity	55	Bit	311.1		.35
174.00	1.94		Plastic Viscosity	4	Bit sub	204		.90
193.00	1.68		Yield Point	12	Drill collars	203	72	18.70
			Gel Strengths	0.75	X/O	162	71	.81
			pH	8.5	Shock tool-SN-M6505502	163	72	2.81
			Water Loss	16.0	Drill collars	167	68	131.48
			Filter Cake	2	X/O	165	56	.75
			Chlorides	2800	HWDP	102		46.82
			Solids	0.083	Kelly down			10.38
			K + mg/l					
			KCL mg/l					
			Daily Cost:	1625				
			Cum. Cost:	8532			TOTAL	213

RIG TIME:

Drilling	11.25	Weld Bowl		Cement	1.75	Safety/BOP	0.25
Rig Service		Fishing		Wodaylight		Reaming	
Tripping	4.75	Logging		Nipple up		Slip & Cut	
Survey	1.25	Coring		DST		Level sub	0.75
Circ./Cond.	1.75	Handle 203mm		Repair		Install wear bushing	
Pick up BHA		Run Casing	2.25	Rig up		Move rig	

24 HOUR OPERATIONS

00:00	00:45	Drill 311 mm hole from 165 - 168 m.
00:45	01:00	Circulate hole clean.
01:00	03:00	Bit trip.
03:00	03:15	Rig service. Function test HCR valve, 4 seconds to open/close.
03:15	07:15	Drill 311 mm hole from 168 - 193 m.
07:15	08:00	Accumulated connection and survey time.
08:00	09:30	Drill 311 mm hole from 193 - 197 m.
09:30	09:45	Rig service. Function annular, 18 seconds to close/open.
09:45	12:30	Drill 311 mm hole from 197 - 206 m.
12:30	13:15	Level substructure.
13:15	15:30	Drill 311 mm hole from 206 - 213 m.
15:30	16:00	Accumulated connection and survey time.
16:00	17:00	Circulate hole clean.
17:00	19:15	Trip out, lay down 203 mm drill collars.
19:15	19:30	Safety meeting with crew prior to running casing.
19:30	21:45	Rig to and run 244.5 mm casing.
21:45	22:15	Circulate hole clean. Safety meeting with crew prior to cement job.
22:15	00:00	Head up and cement casing with 14 tonnes of G cement + 2% CaCl2 + 0.2% D46. Drop plug and displace casing with 8.08 m3 of
		fresh water. Bump plug 3500 kPa over final circulating pressure. Pressure test casing, check floats ok. Recover full returns throughout
		with 1.5 m3 of good cement to surface. Plug down at 2359 hours.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** **Size:** **Rating:** kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes of Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	9	Man Hours:	216	Cumulative per Well:	1801	Supply Trips to Rig: 36	15400 Km Driven:	Incidents: 0		
POB:	Savanna:	11	Service Comp.:	9	Pétrolia/Codeco:	3	Cumulative: 23				
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	10	Daily Delivery:	0	Total Consumption:	85	
Potable Water (m3):		1.5	Available at Rig Site:	1	Daily Consumption:	0.5	Daily Delivery:	0	Total Consumption:	3	
Fuel:	13174		Available at Rig Site:	3000	Daily Consumption:		Daily delivery :	0	Total Consumption:	10174	

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
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DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 26-Oct-09 **Day:** 4
Measured Depth (mMD/KB): 213 m **Vertical Depth (mTVD/KB):** m **Progress:** m
Drilling Hours: Drill Rate: m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Drilling 215 mm hole at 315 m. **Weather:** Sunny, -4 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
1	215.9	MSR13M	126128	213						7 x 9.5	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1700	1720
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1000	1000
SPM			Flowrate (l/m)	800	800
Volume (m3/min)			Operating Hours	20	20

Pump Pressure: **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, Enviroflоc-10, Zetag-4, Alkapam 1103-5.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1000	TOOL	OD	ID	LENGTH
			Viscosity	28	Bit	215.9		.25
			Plastic Viscosity		Mud motor	181		8.14
			Yield Point		X/O	160	72	.34
			Gel Strengths		Stab	165	71	1.27
			pH		Shock tool-SN-M6505502	163	72	2.81
			Water Loss		Drill collars	167	68	131.48
			Filter Cake		X/O	165	56	.75
			Chlorides		HWDP	102	68	37.46
			Solids					
			K + mg/l					
					Kelly down			13.55
			KCL mg/l					
			Daily Cost:	4476				
			Cum. Cost:	13008			TOTAL	196.05

RIG TIME:

Drilling		Weld Bowl	3.50	Cement		Safety/BOP	0.25
Rig Service		Fishing		WOC	4.50	Reaming	
Tripping	2.00	Logging		Nipple up	7.00	Slip & Cut	0.75
Survey		Coring		PT BOP	5.50	Level sub	
Circ./Cond.		Handle 203mm		Repair		Install wear bushing	0.50
Pick up BHA		Run Casing		Rig up		Move rig	

24 HOUR OPERATIONS

00:00	04:30	Wait on cement.
04:30	06:30	Nipple down diverter, cut casing.
06:30	10:00	Weld on casing bowl SN-110728311-1. Pressure test to 7000 kPa, hold for 10 minutes, okay.
10:00	15:00	Nipple up BOPs.
15:00	15:15	Safety meeting.
15:15	18:30	Pressure test BOP components and choke manifold to 1400 kPa low and 7000 kPa high for 10 minutes each.
18:30	19:00	Set wear bushing.
19:00	21:00	Make up BHA and run in hole to 160 m.
21:00	21:45	Pressure test pipe rams with rig pump to 1400 kPa low and 7000 kPa high.
21:45	22:30	Slip and cut drill line.
22:30	00:00	Pressure test upper kelly cock to 1400 kPa low and 7000 kPa high.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	10	Man Hours:	216	Cumulative per Well:	2041	Supply Trips to Rig: 38		17800 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	5	Pétrolia/Codeco:	4	Cumulative:	20			
Drilling Water (m3):		70	Available at Rig Site:	140	Daily Consumption:	10	Daily Delivery:	0	Total Consumption:		95
Potable Water (m3):		1.5	Available at Rig Site:	1.5	Daily Consumption:	1	Daily Delivery:	6	Total Consumption:		4
Fuel:	28267		Available at Rig Site:	15400	Daily Consumption:	1193	Daily delivery :	15093	Total Consumption:		11367

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12.15 hours Rig Released: Well Licence : 2009FC135

PETROLIA
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DAILY DRILLING REPORT

CODECO CONSULTING ENGINEERING
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 27-Oct-09 **Day:** 5
Measured Depth (mMD/KB): 398 m **Vertical Depth (mTVD/KB):** m **Progress:** 185 m
Drilling Hours: 12.75 Drill Rate: 14.50 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Directional drilling 215.9 mm hole at 449 m. **Weather:** Sunny, -4 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
1	215.9	MSR13M	126128	213	398	185	12.75	4000	80	7 x 9.5	1-1-BC-S-X-FC-KOP
2RR	215.9	MSR13M	126128	398						7 x 9.5	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1760	1700
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1005	1005
SPM	88	88	Flowrate (l/m)	800	800
Volume (m3/min)	1.02	1.02	Operating Hours	20	20

Pump Pressure: 9000 **Annular Velocity (m/min): 61** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, Enviroflloc-10, Zetag-4, Alkapam 1103-5

SURVEYS

Depth (mMD)	Inclination (deg)	Direction (deg)
225.00	2.36	
238.00	2.62	
276.00	2.57	
317.00	2.89	
346.00	2.29	
375.00	3.30	

MUD

Mud Weight	1105
Viscosity	43
Plastic Viscosity	9
Yield Point	7
Gel Strengths	2.5/5.0
pH	10.5
Water Loss	18.0
Filter Cake	1.5
Chlorides	16000
Solids	0.005
K + mg/l	18500
Daily Cost:	1374
Cum. Cost:	14374

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
Bit	215.9		.25
Mud motor	181		8.14
X/O	160	72	.34
Stab	165	71	1.27
Shock tool-SN-M6505502	163	72	2.81
Drill collars	167	68	131.48
X/O	165	56	.75
HWDP	102	68	37.46
Drill pipe	102		201.95
Kelly down			13.55
		TOTAL	398

RIG TIME:

Drilling	12.75	Weld Bowl		Cement		Safety/BOP	0.75
Rig Service		Fishing		WOC		Reaming	
Tripping	7.00	Logging		Nipple up		Slip & Cut	
Survey	2.00	Coring		PT BOP	0.50	Level sub	
Circ./Cond.	0.75	Handle 203mm		Repair		P.I. test	0.25
Pick up BHA		Run Casing		Rig up		Move rig	

24 HOUR OPERATIONS

00:00	00:15	BOP drill, well secured in 96 seconds.
00:15	00:45	Accumulated function test. Starting pressure 21,000 kPa, after 3 functions 14,090 kPa. Recharge time 55 seconds.
00:45	02:30	Drill out cement, float collar and float shoe.
02:30	02:45	Drill 215.9 mm hole from 213 - 215 m.
02:45	03:00	Pressure integrity test. Surface pressure applied 2400 kPa. Held for 10 minutes. No bleed down (21.1 kPa/m gradient).
03:00	07:15	Drill 215.9 mm hole from 215 - 315 m.
07:15	08:00	Accumulated surveys and connections.
08:00	08:15	BOP drill, well secured in 120 seconds.
08:15	14:45	Drill 215.9 mm hole from 315 - 398 m. Mud up at 350 m.
14:45	16:00	Accumulated surveys and connections.
16:00	16:45	Circulate hole clean. Safety meeting with Savanna Field Supervisor, crew, Rig Manager, Drilling Foreman.
16:45	17:45	Trip out of hole.
17:45	19:30	Lay down BHA.
19:30	19:45	Safety meeting with crew prior to handling directional tools.
19:45	22:00	Make up directional tools.
22:00	00:00	Run in hole, lay down 20 drill pipe, pick up 32 HWDP.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size: 244.5m x 279mm** **Rating: 21000** kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	11	Man Hours:	324	Cumulative per Well:	2365	Supply Trips to Rig: 40		20200 Km Driven:		Incidents: 0
POB:	Savanna:	17	Service Comp.:	6	Pétrolia/Codeco:	4	Cumulative:	27			
Drilling Water (m3):		70	Available at Rig Site:	140	Daily Consumption:	10	Daily Delivery:	0	Total Consumption:		105
Potable Water (m3):		0	Available at Rig Site:	1	Daily Consumption:	1	Daily Delivery:	0	Total Consumption:		5
Fuel:	28267		Available at Rig Site:	15400	Daily Consumption:	2800	Daily delivery :	0	Total Consumption:		14167

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 28-Oct-09 **Day:** 6
Measured Depth (mMD/KB): 640 m **Vertical Depth (mTVD/KB):** 636 m **Progress:** 242 m
Drilling Hours: 17.50 Drill Rate: 13.80 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Directional drilling 215.9 mm hole at 667 m. **Weather:** Cloudy, -5 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
2RR	215.9	MSR13M	126128	398	640	242	17.50	4000	110	7 x 9.5	2-2-FC-S-X-0-CT-PR

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1760	1700
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1005	1005
SPM	95	95	Flowrate (l/m)	800	800
Volume (m3/min)	1.11	1.11	Operating Hours	20	20

Pump Pressure: 10300 **Annular Velocity (m/min): 78** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, Defoamer-2, MF Pac R-5, Lignite-4, Soltex-5, Corinox-2, MF Vis-1.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1080	TOOL	OD	ID	LENGTH
			Viscosity	43	Bit	215.9		.25
239.91	2.20	288.40	Plastic Viscosity	9	Mud motor	168		8.14
333.55	3.10	295.70	Yield Point	8.5	FNMDC	165	83	9.47
394.56	3.90	292.20	Gel Strengths	3.0/5.0	Transmitter sub	165	83	1.65
410.00	4.22	297.06	pH	9.5	FNMDC	165	71	9.47
432.97	5.00	310.40	Water Loss	8.0	X/O	160	63	0.34
452.12	4.90	311.30	Filter Cake	1	Shock tool-SN-M6505502	163	72	2.81
471.37	5.80	308.40	Chlorides	15000	Jar	165	65	6.65
490.63	8.10	312.40	Solids	0.051	X/O	167	56	0.75
509.81	10.20	315.10	K + mg/l	16500	HWDP	102	68	337.1
538.43	11.40	321.10			Drill pipe	102		249.87
567.30	13.20	323.80	KCL mg/l		Kelly down			13.5
596.15	17.20	324.30	Daily Cost:	4442				
625.05	20.30	322.90	Cum. Cost:	18816			TOTAL	640

RIG TIME:

Drilling	17.50	Weld Bowl		Cement		Safety/BOP	0.50
Rig Service	0.50	Fishing		WOC		Reaming	
Tripping	2.75	Logging		Nipple up		Slip & Cut	
Survey	2.50	Coring		PT BOP		Level sub	
Circ./Cond.	0.25	Handle 203mm		Repair		P. I. test	
Pick up BHA		Run Casing		Rig up		Move rig	

24 HOUR OPERATIONS

00:00	01:30	Run in hole with directional surveys every 50 m.
01:30	01:45	Safety meeting.
01:45	07:00	Drill 215.9 mm hole from 398 - 457 m.
07:00	08:00	Accumulate directional surveys and connections.
08:00	08:15	Rig service, function test pipe rams.
08:15	14:30	Directional drill 215.9 mm hole from 457 - 572 m.
14:30	14:45	BOP drill, well secured in 90 seconds.
14:45	16:00	Accumulate directional surveys and connections.
16:00	16:15	Rig service, function HCR valve.
16:15	22:15	Directional drill 215.9 mm hole from 572 - 640 m.
22:15	22:30	Accumulate directional surveys and connections.
22:30	22:45	Circulate hole clean.
22:45	00:00	Trip out for bit.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size: 244.5m x 279mm** **Rating: 21000 kPa**

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	12	Man Hours:	252	Cumulative per Well:	2617	Supply Trips to Rig:	40	20200 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	6	Pétrolia/Codeco:	4	Cumulative:	21			
Drilling Water (m3):		70	Available at Rig Site:	50	Daily Consumption:	20	Daily Delivery:	0	Total Consumption:		125
Potable Water (m3):		8	Available at Rig Site:	8	Daily Consumption:	1	Daily Delivery:	8	Total Consumption:		6
Fuel:	28267		Available at Rig Site:	12600	Daily Consumption:	2800	Daily delivery :	0	Total Consumption:		16967

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12.15 hours Rig Released: Well Licence: 2009FC135

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DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 29-Oct-09 **Day:** 7
Measured Depth (mMD/KB): 821 m **Vertical Depth (mTVD/KB):** 801 m **Progress:** 181 m
Drilling Hours: 14.25 Drill Rate: 12.70 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Directional drilling 215.9 mm hole at 880 m. **Weather:** Cloudy, -6 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
3	215.9	Q505	7900014	640			14.25	5000	110	7 x 10.3	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1760	1700
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1170	1170
SPM	95	95	Flowrate (l/m)	800	800
Volume (m3/min)	1.11	1.11	Operating Hours	14	14

Pump Pressure: 12600 **Annular Velocity (m/min): 78** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, Defoamer-2, MF Pac R-4, Lignite-4, Soltex-4, Corinox-1, MF Vis-3, Caustic-1, Barite-20, Soda Ash-1.

SURVEYS

Depth (mMD)	Inclination (deg)	Direction (deg)
634.68	20.10	321.80
653.86	20.70	317.20
673.13	20.20	318.80
692.40	20.10	321.20
711.70	20.20	315.60
731.02	20.00	311.80
750.28	19.70	309.30
769.60	20.00	310.00
788.80	20.70	318.90
808.07	21.20	317.90
817.69	21.30	315.00
827.32	21.00	319.20

MUD

Mud Weight	1075
Viscosity	48
Plastic Viscosity	8
Yield Point	10.5
Gel Strengths	3.0/5.0
pH	9.5
Water Loss	8.0
Filter Cake	1
Chlorides	15000
Solids	0.051
K + mg/l	16500
KCL mg/l	
Daily Cost:	4548
Cum. Cost:	23364

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
Bit	215.9		.25
Mud motor	168		8.14
FNMDC	165	83	9.47
Transmitter sub	165	83	1.65
FNMDC	165	71	9.47
X/O	160	63	0.34
Shock tool-SN-M6505502	163	72	2.81
Jar	165	65	6.65
X/O	167	56	0.75
HWDP	102	68	337.1
Drill pipe	102		432.89
Kelly down			11.48
		TOTAL	821

RIG TIME:

Drilling	14.25	Weld Bowl		Cement		Safety/BOP	
Rig Service	2.25	Fishing		WOC		Reaming	
Tripping	5.00	Logging		Nipple up		Slip & Cut	
Survey	2.50	Coring		PT BOP		Level sub	
Circ./Cond.		Handle 203mm		Repair		P. I. test	
Pick up BHA		Run Casing		Rig up		Move rig	

24 HOUR OPERATIONS

00:00	05:00	Bit trip.
05:00	07:30	Directional drill 215.9 mm hole from 640 - 668 m.
07:30	07:45	Directioanl survey.
07:45	08:00	Rig service, function test annular.
08:00	09:45	Directional drill from 668 - 688 m.
09:45	10:00	Rig service, function test pipe rams.
10:00	11:30	Inspect mud pump. Clean valves, replace valve spring.
11:30	14:45	Directional drill from 688 - 736 m.
14:45	16:00	Accumulate directional surveys and connections.
16:00	16:15	Rig service, function test HCR valve.
16:15	23:00	Directional drill 215.9 mm hole from 736 - 821 m.
23:00	00:00	Accumulate directional surveys and connections.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE: Exposure: 13 Man Hours: 252 Cumulative per Well: 2845 Supply Trips to Rig: 41 21400 Km Driven: Incidents: 0
POB: Savanna: 11 Service Comp.: 4 Pétrolia/Codeco: 4 Cumulative: 19
Drilling Water (m3): 100 Available at Rig Site: 100 Daily Consumption: 30 Daily Delivery: 0 Total Consumption: 155
Potable Water (m3): 2 Available at Rig Site: 2 Daily Consumption: 2 Daily Delivery: 0 Total Consumption: 8
Fuel: 28267 Available at Rig Site: 8000 Daily Consumption: 4600 Daily delivery : 0 Total Consumption: 21567

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

PETROLIA
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DAILY DRILLING REPORT

CODECO
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 30-Oct-09 **Day:** 8
Measured Depth (mMD/KB): 941 m **Vertical Depth (mTVD/KB):** 919 m **Progress:** 120 m
Drilling Hours: 12.50 Drill Rate: 9.52 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Directional drilling 215.9 mm hole at 987 m. **Weather:** Rain, 5 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
3	215.9	Q505	7900014	640	909	269	24.25	5000	110	7 x 10.3	2-2-FC-S-X-0-BC-PR
4	215.9	MSF513M	126765	909				5000	110	7 x 9.5	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1760	1700
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1075	1075
SPM	95	95	Flowrate (l/m)	800	800
Volume (m3/min)	1.11	1.11	Operating Hours	13	13

Pump Pressure: 9800 **Annular Velocity (m/min): 78** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, Defoamer-2, MF Pac R-4, Lignite-4, Soltex-4, Corinox-1, MF Vis-3, Caustic-1, Barite-20, Soda Ash-1.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1080	TOOL	OD	ID	LENGTH
			Viscosity	44	Bit	215.9		.25
836.95	20.40	321.80	Plastic Viscosity	10	Mud motor	168		8.14
846.51	20.20	320.40	Yield Point	9	FNMDC	165	83	9.47
856.23	20.40	320.80	Gel Strengths	3.0/4.0	Transmitter sub	165	83	1.65
865.87	20.90	321.30	pH	10.0	FNMDC	165	71	9.47
875.48	21.40	322.40	Water Loss	10.0	X/O	160	63	0.34
885.10	21.60	319.50	Filter Cake	1	Shock tool-SN-M6505502	163	72	2.81
894.84	21.30	320.40	Chlorides	16500	Jar	165	65	6.65
904.43	20.90	321.10	Solids	0.051	X/O	167	56	0.75
914.06	19.70	318.60	K + mg/l	18000	HWDP	102	68	337.1
923.69	19.30	315.60			Drill pipe	102		558.1
933.38	19.20	315.30	KCL mg/l		Kelly down			6.27
			Daily Cost:	2661				
			Cum. Cost:	26025			TOTAL	941

RIG TIME:

Drilling	12.50	Weld Bowl		Cement		Safety/BOP	
Rig Service	1.25	Fishing		WOC		Reaming	
Tripping	7.50	Logging		Nipple up		Slip & Cut	
Survey	2.50	Coring		PT BOP		Level sub	
Circ./Cond.	0.25	Handle 203mm		Repair		P. I. test	
Pick up BHA		Run Casing		Rig up		Move rig	

24 HOUR OPERATIONS

00:00	00:15	Rig service, function annular.
00:15	02:15	Directional drill from 821 - 833 m.
02:15	02:45	Replace blown head on pump.
02:45	06:30	Directional drill from 833 - 871 m.
06:30	08:00	Accumulate directional surveys and connections.
08:00	08:15	Rig service, function test pipe rams.
08:15	12:30	Directional drill from 871 - 909 m.
12:30	13:00	Accumulate directional surveys and connections.
13:00	13:15	Circulate hole clean.
13:15	20:00	Trip out, service directional tools, trip in hole.
20:00	20:45	Wash down from 890 - 909 m.
20:45	23:15	Directional drill from 909 - 940 m.
23:15	23:30	Rig service, function HCR valve.
23:30	00:00	Accumulate directional surveys and connections.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size: 244.5m x 279mm** **Rating: 21000 kPa**

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	14	Man Hours:	216	Cumulative per Well:	3061	Supply Trips to Rig: 45		33200 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	3	Cumulative:	18			
Drilling Water (m3):		100	Available at Rig Site:	100	Daily Consumption:	30	Daily Delivery:	0	Total Consumption:		185
Potable Water (m3):		2	Available at Rig Site:	2	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:		10
Fuel:		42246	Available at Rig Site:	25926	Daily Consumption:	3000	Daily delivery :	13979	Total Consumption:		24567

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

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DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 31-Oct-09 **Day:** 9
Measured Depth (mMD/KB): 1049 m **Vertical Depth (mTVD/KB):** 1018 m **Progress:** 108 m
Drilling Hours: 19.75 Drill Rate: 5.46 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Directional drilling 215.9 mm hole at 1073 m. **Weather:** Sunny, 15 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
4	215.9	MSF513M	126765	909		140	22.25	8000	110	7 x 10.3	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1745	1740
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1055	1055
SPM	95	95	Flowrate (l/m)	900	900
Volume (m3/min)	1.11	1.11	Operating Hours	24	24

Pump Pressure: 14100 **Annular Velocity (m/min): 78** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, Defoamer-4, MF Pac R-7, Soltex-12, Corinox-1, MF Vis-3, Caustic 7.

SURVEYS

Depth (mMD)	Inclination (deg)	Direction (deg)
942.91	19.50	133.70
952.55	19.80	313.00
962.18	19.70	313.80
971.78	19.50	313.40
981.42	19.40	314.30
991.08	19.50	316.20
1000.63	19.60	316.80
1010.27	20.10	316.70
1020.01	20.40	316.90
1029.64	20.80	316.30
1039.37	21.10	316.50

MUD

Mud Weight	1070
Viscosity	45
Plastic Viscosity	9
Yield Point	8
Gel Strengths	3.0/4.0
pH	10.5
Water Loss	10.0
Filter Cake	1
Chlorides	9000
Solids	0.043
K + mg/l	9500
KCL mg/l	
Daily Cost:	5995
Cum. Cost:	32020

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
Bit	215.9		.25
Mud motor	168		8.14
FNMDC	165	83	9.47
Transmitter sub	165	83	1.65
FNMDC	165	71	9.47
X/O	160	63	0.34
Shock tool-SN-M6505502	163	72	2.81
Jar	165	65	6.65
X/O	167	56	0.75
HWDP	102	68	337.1
Drill pipe	102		664.19
Kelly down			8.18
		TOTAL	1049

RIG TIME:

Drilling	19.75	Weld Bowl		Cement		Safety/BOP	
Rig Service	0.75	Fishing		WOC		Reaming	
Tripping		Logging		Nipple up		Slip & Cut	
Survey	3.50	Coring		PT BOP		Level sub	
Circ./Cond.		Handle 203mm		Repair		P. I. test	
Pick up BHA		Run Casing		Rig up		Move rig	

24 HOUR OPERATIONS

00:00	00:15	Rig service, function test annular.
00:15	07:15	Directional drill 215.9 mm hole from 940 - 986 m.
07:15	08:00	Accumulate directional surveys and connections.
08:00	08:15	Rig service, function test pipe rams.
08:15	14:30	Directional drill 215.9 mm hole from 986 - 1019 m.
14:30	16:00	Accumulate directional surveys and connections.
16:00	16:15	Rig service, function test HCR valve.
16:15	22:45	Directional drill 215.9 mm hole from 1019 - 1049 m.
22:45	00:00	Accumulate directional surveys and connections.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	15	Man Hours:	216	Cumulative per Well:	3277	Supply Trips to Rig:	46	34200 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	3	Cumulative:	18			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	30	Daily Delivery:	0	Total Consumption:		215
Potable Water (m3):		8	Available at Rig Site:	8	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:		12
Fuel:	42246		Available at Rig Site:	12400	Daily Consumption:	5278	Daily delivery :	0	Total Consumption:		29845

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

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DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 01-Nov-09 **Day:** 10
Measured Depth (mMD/KB): 1131 m **Vertical Depth (mTVD/KB):** 1090 m **Progress:** 82 m
Drilling Hours: 17.75 Drill Rate: 4.62 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Directional drilling 215.9 mm hole at 1160 m. **Weather:** Sunny -3 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
4	215.9	MSF513M	126765	909		222	40.00	10000	110	7 x 10.3	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1740	1730
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1070	1070
SPM	95	95	Flowrate (l/m)	900	900
Volume (m3/min)	1.11	1.11	Operating Hours	24	24

Pump Pressure: 15700 **Annular Velocity (m/min): 78** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, defoamer 2, MF Pac R 4,soltex 8, corinox 1, caustic 4, biocide 1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1065	TOOL	OD	ID	LENGTH
1048.94	21.00	316.30	Viscosity	40	Bit	215.9		.25
1058.58	21.30	317.40	Plastic Viscosity	8	Mud motor	168		8.14
1068.19	21.30	317.20	Yield Point	5	FNMDC	165	83	9.47
1077.83	21.30	316.30	Gel Strengths	2.0/3.0	Transmitter sub	165	83	1.65
1087.38	20.90	315.80	pH	10.5	FNMDC	165	71	9.47
1096.96	20.40	314.90	Water Loss	10.0	X/O	160	63	0.34
1106.59	20.60	314.70	Filter Cake	1	Shock tool-SN-M6505502	163	72	2.81
1116.23	21.10	315.30	Chlorides	8000	Jar	165	65	6.65
1125.96	20.70	313.40	Solids	0.005	X/O	167	56	0.75
1135.50	20.10	312.60	K + mg/l	3800	HWDP	102	68	337.1
					Drill pipe	102		741.05
			KCL mg/l		Kelly down			13.32
			Daily Cost:	4214				
			Cum. Cost:	36234			TOTAL	1131

RIG TIME:

Drilling	17.75	Weld Bowl		Cement		Safety/BOP	
Rig Service	0.75	Fishing		WOC		Reaming	
Tripping		Logging		Nipple up		Slip & Cut	
Survey	5.50	Coring		PT BOP		Level sub	
Circ./Cond.		Handle 203mm		Replace head	1.00	Time change	
Pick up BHA		Run Casing		Rig up		Move rig	

24 HOUR OPERATIONS

00:00	01:00	Directional drill from 1049 m - 1054 m. Time change (daylight savings time).
00:00	00:15	Rig service, function test annular.
00:15	06:00	Directional drill from 1054 m - 1073 m.
06:00	06:30	Replace piston in mud pump.
06:30	08:00	Accumulate connection and survey time.
08:00	08:15	Rig service, function test pipe rams.
08:15	13:00	Directional drill from 1073 m - 1100 m.
13:00	13:30	Replace rubber in safety pop valve.
13:30	16:00	Accumulate connection and survey time.
16:00	22:15	Directional drill 215.9 mm hole from 1100 m - 1131 m.
22:15	22:30	Rig service, function test HCR valve.
22:30	00:00	Accumulate connection and survey time.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size: 244.5m x 279mm** **Rating: 21000 kPa**

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J-55 LT&C casing.
Landed at 212.0 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE: Exposure: 16 Man Hours: 216 Cumulative per Well: 3493 Supply Trips to Rig: 46 34200 Km Driven: Incidents: 0
POB: Savanna: 11 Service Comp.: 4 Pétrolia/Codeco: 3 Cumulative: 18
Drilling Water (m3): 70 Available at Rig Site: 70 Daily Consumption: 30 Daily Delivery: 0 Total Consumption: 245
Potable Water (m3): 8 Available at Rig Site: 8 Daily Consumption: 2 Daily Delivery: Total Consumption: 14
Fuel: 42246 Available at Rig Site: 7267 Daily Consumption: 5133 Daily delivery : 0 Total Consumption: 34978

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 02-Nov-09 **Day:** 11
Measured Depth (mMD/KB): 1194 m **Vertical Depth (mTVD/KB):** 1154 m **Progress:** 60 m
Drilling Hours: 12.00 Drill Rate: 5.00 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Directional drilling 215.9 mm hole at 1240 m. **Weather:** Cloudy, 6 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
4	215.9	MSF513M	126765	909	1171	262	50.50	10000	110	7 x 10.3	5-4-FC-N-X-0-No-BHA
5	215.9	MS1613	ER25120	1171		24	2.25	6000	110	6 x 11.8	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1700	1700
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1050	1050
SPM	95	95	Flowrate (l/m)	900	900
Volume (m3/min)	1.11	1.11	Operating Hours	24	24

Pump Pressure: 14800 **Annular Velocity (m/min): 78** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, Defoamer-2, MF Pac R-2, Soltex-1, Corinox-1, Caustic-2, Biocide-3.

SURVEYS

Depth (mMD)	Inclination (deg)	Direction (deg)
1145.14	19.50	313.90
1154.76	19.40	314.50
1164.84	18.90	314.00
1174.47	19.30	314.00
1184.11	19.20	314.60
1193.74	19.30	314.70

MUD

Mud Weight	1070
Viscosity	44
Plastic Viscosity	10
Yield Point	5.5
Gel Strengths	2.0/3.0
pH	10.5
Water Loss	9.0
Filter Cake	1
Chlorides	8000
Solids	0.045
K + mg/l	3400
KCL mg/l	
Daily Cost:	3101
Cum. Cost:	39335

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
Bit	215.9		.25
Mud motor/XO	168		8.57
FNMDC	165	83	9.47
Transmitter sub	165	83	1.65
FNMDC	165	71	9.47
X/O	160	63	0.34
Shock tool-SN-M6505502	163	72	2.81
Jar	165	65	6.65
X/O	167	56	0.75
HWDP	102	68	337.1
Drill pipe	102		808.5
Kelly down			8.44
		TOTAL	1194

RIG TIME:

Drilling	12.00	Weld Bowl		Cement		Safety/BOP	
Rig Service	0.75	Fishing		WOC		Reaming	
Tripping	7.50	Logging		Nipple up		Slip & Cut	
Survey	2.00	Coring		PT BOP		Level sub	
Circ./Cond.	0.25	Handle 203mm		Replace pop	0.75	Time change	
Pick up BHA		Run Casing		Rig repair	0.75	Move rig	

24 HOUR OPERATIONS

00:00	00:15	Rig service, function test annular.
00:15	06:30	Directional drill 215.9 mm hole from 1131 - 1160 m.
06:30	07:15	Accumulated connection and survey time.
07:15	08:00	Repair fuel line on floor motor.
08:00	09:30	Directional drill 215.9 mm hole.
09:30	10:15	Clean out suction screen, change out safety relief valve.
10:15	10:30	Rig service, function test pipe rams.
10:30	12:30	Directional drill 215.9 mm hole to 1171 m.
12:30	13:00	Accumulated connection and survey time.
13:00	13:15	Circulate hole clean.
13:15	20:45	Round trip. Change out mud motor, make up new bit. Wash down from 1150 - 1171 m.
20:45	23:00	Directional drill 215.9 mm hole from 1171 - 1191 m.
23:00	23:15	Rig service, function test HCR valve.
23:15	00:00	Accumulated connection and survey time.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	17	Man Hours:	216	Cumulative per Well:	3709	Supply Trips to Rig: 47		35200 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	3	Cumulative:	18			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	30	Daily Delivery:	0	Total Consumption:		275
Potable Water (m3):		8	Available at Rig Site:	8	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:		16
Fuel:	42246		Available at Rig Site:	3267	Daily Consumption:	4000	Daily delivery :	0	Total Consumption:		38978

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
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DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 03-Nov-09 **Day:** 12
Measured Depth (mMD/KB): 1302 m **Vertical Depth (mTVD/KB):** 1254 m **Progress:** 108 m
Drilling Hours: 19.00 Drill Rate: 5.68 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Directional drilling 215.9 mm hole at 1328 m. **Weather:** Cloudy, 2 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
5	215.9	MS1613	ER25120	1171	0	131	21.50	10000	110	6 x 11.8	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1710	1680
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1060	1060
SPM	95	95	Flowrate (l/m)	900	900
Volume (m3/min)	1.11	1.11	Operating Hours	24	24

Pump Pressure: 16200 **Annular Velocity (m/min): 78** **Jet Velocity (m/s):**

MUD ADDITIVES: Correction, Mud Man-1, MF Pac R-2, Soltex-1, Corinox-2, Caustic-3, Alkapam-1, Gel-18, Envirofloc-1, Lime-1, Sawdust-6, Starch-3.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1075	TOOL	OD	ID	LENGTH
1203.26	19.30	315.10	Viscosity	47	Bit	215.9		.25
1212.89	19.50	315.50	Plastic Viscosity	13	Mud motor/XO	168		8.57
1222.49	19.40	315.90	Yield Point	8	FNMDC	165	83	9.47
1232.15	20.00	315.60	Gel Strengths	2.5/4.0	Transmitter sub	165	83	1.65
1241.70	20.10	316.00	pH	10.0	FNMDC	165	71	9.47
1251.28	19.70	313.90	Water Loss	9.0	X/O	160	63	0.34
1260.91	20.00	314.00	Filter Cake	1	Shock tool-SN-M6505502	163	72	2.81
1270.64	20.10	314.40	Chlorides	9000	Jar	165	65	6.65
1280.27	19.30	315.50	Solids	0.051	X/O	167	56	0.75
1289.90	19.40	316.10	K + mg/l	3230	HWDP	102	68	337.1
1299.55	19.60	317.60			Drill pipe	102		914.29
			KCL mg/l		Kelly down			10.65
			Daily Cost:	3276				
			Cum. Cost:	42611			TOTAL	1302

RIG TIME:

Drilling	19.00	Weld Bowl		Cement		Safety/BOP	0.50
Rig Service	1.00	Fishing		WOC		Reaming	
Tripping		Logging		Nipple up		Slip & Cut	
Survey	3.50	Coring		PT BOP		Level sub	
Circ./Cond.		Handle 203mm		Replace pop valve		Time change	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:15	Rig service, function test annular.
00:15	06:30	Directional drill 215.9 mm hole from 1194 - 1237 m.
06:30	08:00	Accumulate directional surveys and connection time.
08:00	08:15	Rig service, function test pipe rams.
08:15	08:30	BOP drill, well secured in 97 seconds.
08:30	15:00	Directional drill 215.9 mm hole from 1237 - 1275 m.
15:00	16:00	Accumulate directional surveys and connection time.
16:00	19:00	Directional drill 215.9 mm hole from 1275 - 1285 m.
19:00	19:15	Rig service, function test HCR valve.
19:15	19:30	Replace piston and liner in mud pump.
19:30	22:45	Directional drill from 1285 - 1302 m.
22:45	23:45	Accumulate directional surveys and connection time.
23:45	00:00	BOP drill, well secured in 90 seconds.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size: 244.5m x 279mm** **Rating: 21000 kPa**

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	18	Man Hours:	228	Cumulative per Well:	3937	Supply Trips to Rig: 48		36200	Km Driven:	Incidents: 0
POB:	Savanna:	11	Service Comp.:	5	Pétrolia/Codeco:	3	Cumulative:	19			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	30	Daily Delivery:		0	Total Consumption:	275
Potable Water (m3):		8	Available at Rig Site:	8	Daily Consumption:	2	Daily Delivery:		0	Total Consumption:	18
Fuel:	62591		Available at Rig Site:	18023	Daily Consumption:	5590	Daily delivery :		20345	Total Consumption:	44568

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
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Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 04-Nov-09 **Day:** 13
Measured Depth (mMD/KB): 1361 m **Vertical Depth (mTVD/KB):** 1311 m **Progress:** 59 m
Drilling Hours: 13.50 Drill Rate: 4.37 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Drilling 215.9 mm hole at 1380 m. **Weather:** Sunny, -5 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
5	215.9	MS1613	ER25120	1171	1328	157	28.25	10000	110	6 x 11.8	4-4-FC-A-X-0-No-PR
6	215.9	MS1616	ER20815	1328		33	6.75	10000	110	6 x 11.9	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1700	1680
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1055	1055
SPM	95	95	Flowrate (l/m)	900	900
Volume (m3/min)	1.11	1.11	Operating Hours	24	24

Pump Pressure: 16700 **Annular Velocity (m/min): 78** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, MF Pac R-1, Caustic-3, Defoamer-4.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1070	TOOL	OD	ID	LENGTH
1309.19	19.90	318.50	Viscosity	40	Bit	215.9		.25
1350.00	19.47		Plastic Viscosity	10	Mud motor/XO	168		8.18
			Yield Point	6.5	X/O	160	69	.39
			Gel Strengths	1.0/2.0	X/O	160	63	.34
			pH	10.5	Shock tool-SN-M6505502	163	72	2.81
			Water Loss	10.0	X/O	167	56	.75
			Filter Cake	1	HWDP/XO	164	68	225.44
			Chlorides	7500	Jar	165	60	6.65
			Solids %	5	X/O	165	65	88
			K + mg/l	2500	HWDP	102	68	112.35
					Drill pipe	102	62	991.36
			KCL mg/l		Kelly down			11.6
			Daily Cost:	1673				
			Cum. Cost:	44284			TOTAL	1361

RIG TIME:

Drilling	13.50	Weld Bowl		Cement		Safety/BOP	0.25
Rig Service	0.75	Fishing		WOC		Reaming	
Tripping	6.75	Logging		Nipple up		Slip & Cut	0.75
Survey	1.50	Coring		PT BOP		Level sub	
Circ./Cond.	0.50	Handle 203mm		Replace pop valve		Time change	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	06:45	Drill 215.9 mm hole from 1302 - 1328 m.
06:45	07:00	Rig service, function test annular.
07:00	08:00	Accumulate directional surveys and connection time.
08:00	08:15	Rig service, function test pipe rams.
08:15	08:45	Circulate hole clean.
08:45	09:00	Safety meeting with crew prior to bit trip.
09:00	15:15	Trip out, lay down directional tools, make up new BHA and bit, run in hole.
15:15	16:00	Slip and cut drill line.
16:00	16:30	Wash down from 1328 - 1361 m.
16:30	16:45	Rig service, function test HCR valve.
16:45	23:30	Drill 215.9 mm hole from 1328 - 1361 m.
23:30	00:00	Accumulate directional surveys and connection time.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size: 244.5m x 279mm** **Rating: 21000 kPa**

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	19	Man Hours:	204	Cumulative per Well:	4141	Supply Trips to Rig: 50	38200	Km Driven:	Incidents: 0	
POB:	Savanna:	11	Service Comp.:	3	Pétrolia/Codeco:	3	Cumulative:	17			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	30	Daily Delivery:	0	Total Consumption:		305
Potable Water (m3):		8	Available at Rig Site:	8	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:		20
Fuel:	62591		Available at Rig Site:	15023	Daily Consumption:	3000	Daily delivery :		Total Consumption:		47568

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 05-Nov-09 **Day:** 14
Measured Depth (mMD/KB): 1440 m **Vertical Depth (mTVD/KB):** 1384 m **Progress:** 79 m
Drilling Hours: 20.50 Drill Rate: 3.85 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Trip in hole with bit #6. **Weather:** Overcast, light snow, 1 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
6	215.9	MS1616	ER20815	1328		112	27.75	10000	110	6 x 11.9	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1700	1680
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1045	1045
SPM	95	95	Flowrate (l/m)	900	900
Volume (m3/min)	1.11	1.11	Operating Hours	24	24

Pump Pressure: 18000 **Annular Velocity (m/min): 78** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, MF Pac R-6, Caustic-2, Defoamer-3, Biocide 352-2, Corinox-1.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1070	TOOL	OD	ID	LENGTH
1350.00	19.47		Viscosity	44	Bit	215.9		.25
1388.00	>20		Plastic Viscosity	15	Mud motor/XO	168		8.18
			Yield Point	5.5	X/O	160	69	.39
			Gel Strengths	2.0/3.0	X/O	160	63	.34
			pH	10.0	Shock tool-SN-M6505502	163	72	2.81
			Water Loss	10.0	X/O	167	56	.75
			Filter Cake	1	HWDP/XO	164	68	225.44
			Chlorides	7500	Jar	165	60	6.65
			Solids %	5	X/O	165	65	.88
			K + mg/l	2500	HWDP	102	68	112.35
					Drill pipe	102	62	1068.42
			KCL mg/l		Kelly down			13.54
			Daily Cost:	3253				
			Cum. Cost:	47537			TOTAL	1440

RIG TIME:

Drilling	20.50	Weld Bowl		Cement		Safety/BOP	
Rig Service	0.75	Fishing		WOC		Reaming	
Tripping		Logging		Nipple up		Slip & Cut	
Survey	2.75	Coring		PT BOP		Level sub	
Circ./Cond.		Handle 203mm		Replace pop valve		Time change	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:15	Rig service, function test annular.
00:15	07:00	Drill 215.9 mm hole from 1361 - 1382 m.
07:00	08:00	Accumulate surveys and connection time.
08:00	08:15	Rig service, function test pipe rams.
08:15	15:30	Drill 215.9 mm hole from 1382 - 1420 m.
15:30	16:00	Accumulate connection times.
16:00	16:15	Rig service, function HCR valve.
16:15	17:30	Accumulate surveys and connection time.
17:30	00:00	Drill 215.9 mm hole from 1420 - 1440 m.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	20	Man Hours:	252	Cumulative per Well:	4393	Supply Trips to Rig: 52	40200	Km Driven:	Incidents: 0	
POB:	Savanna:	11	Service Comp.:	6	Pétrolia/Codeco:	4	Cumulative:	21			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	30	Daily Delivery:	0	Total Consumption:		335
Potable Water (m3):		8	Available at Rig Site:	6	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:		22
Fuel:	80753		Available at Rig Site:	27185	Daily Consumption:	6000	Daily delivery :	18162	Total Consumption:		53568

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 06-Nov-09 **Day:** 15
Measured Depth (mMD/KB): 1582 m **Vertical Depth (mTVD/KB):** 1519 m **Progress:** 142 m
Drilling Hours: 12.75 Drill Rate: 11.10 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Drill 215.9 mm hole at 1643 m. **Weather:** Cloudy, -1 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
6	215.9	MS1616	ER20815	1328	1443	115	29.50	10000	110	6 x 11.9	4-4-FC-A-X-0-CT-PR
7	215.9	MSR616	122358	1443		139	11.00	8000	110	7 x 10.3	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1710	1730
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1060	1060
SPM	95	95	Flowrate (l/m)	900	900
Volume (m3/min)	1.11	1.11	Operating Hours	24	24

Pump Pressure: 19000 **Annular Velocity (m/min): 78** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1 ,MF Pac R-4, MF Vis-2, Caustic-1, Corinox-1.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1075	TOOL	OD	ID	LENGTH
1445.00	19.23		Viscosity	44	Bit	215.9		.25
1484.00	>20		Plastic Viscosity	14	Mud motor/XO	168		8.18
1532.00	>20		Yield Point	7	X/O	160	69	.39
			Gel Strengths	2.0/3.0	X/O	160	63	.34
			pH	10.0	Shock tool-SN-M6505502	163	72	2.81
			Water Loss	9.5	X/O	167	56	.75
			Filter Cake	1	HWDP/XO	164	68	225.44
			Chlorides	6000	Jar	165	60	6.65
			Solids %	5.3	X/O	165	65	.88
			K + mg/l	1900	HWDP	102	68	112.35
					Drill pipe	102	62	1212.71
			KCL mg/l		Kelly down			11.25
			Daily Cost:	2509				
			Cum. Cost:	50046			TOTAL	1582

RIG TIME:

Drilling	12.75	Weld Bowl		Cement		Safety/BOP	
Rig Service	0.75	Fishing		WOC		Reaming	
Tripping	6.75	Logging		Nipple up		Slip & Cut	
Survey	3.00	Coring		PT BOP		Level sub	
Circ./Cond.	0.50	Handle 203mm		Clean rig flo	0.25	Time change	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:15	Rig service, function test annular.
00:15	02:00	Drill 215.9 mm hole from 1440 - 1443 m.
02:00	02:45	Circulate hole clean.
02:45	06:15	Trip out for bit.
06:15	06:30	Clean rig floor.
06:30	09:45	Run in hole. Wash down from 1423 - 1443 m.
09:45	14:30	Drill 215.9 mm hole from 1443 - 1507 m.
14:30	14:45	Rig service, function test pipe rams.
14:45	16:00	Accumulate connection and survey times.
16:00	16:15	Rig service, function test HCR valve.
16:15	22:30	Drill 215.9 mm hole from 1507 - 1582 m.
22:30	00:00	Accumulate connection and survey times.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB.
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE: Exposure: 21 Man Hours: 252 Cumulative per Well: 4649 Supply Trips to Rig: 53 41200 Km Driven: Incidents: 0
POB: Savanna: 11 Service Comp.: 6 Pétrolia/Codeco: 4 Cumulative: 21
Drilling Water (m3): 70 Available at Rig Site: 70 Daily Consumption: 10 Daily Delivery: 0 Total Consumption: 345
Potable Water (m3): 8 Available at Rig Site: 8 Daily Consumption: 2 Daily Delivery: 8 Total Consumption: 24
Fuel: 80753 Available at Rig Site: 27185 Daily Consumption: 6000 Daily delivery : 18162 Total Consumption: 53568

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 07-Nov-09 **Day:** 16
Measured Depth (mMD/KB): 1711 m **Vertical Depth (mTVD/KB):** m **Progress:** 129 m
Drilling Hours: 19.00 Drill Rate: 6.78 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Trip in hole, ready site for public site tour. **Weather:** Cloudy, -1 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
7	215.9	MSR616	122358	1443	1711	268	30.25	10000	110	7 x 10.3	4-4-FC-A-X-0-CT-PR
8	215.9	MSF613	122358	1711							

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1710	1730
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1060	1055
SPM	95	95	Flowrate (l/m)	900	900
Volume (m3/min)	1.11	1.11	Operating Hours	24	24

Pump Pressure: 19000 **Annular Velocity (m/min): 78** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, MF Pac R-4, Caustic-3, Corinox-1, Defoamer-2, Aqua Star-4, Sawdust-23.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1070	TOOL	OD	ID	LENGTH
1581.00	>20		Viscosity	45	Bit	215.9		.25
1628.00	>20		Plastic Viscosity	12	Mud motor/XO	168		8.18
1686.00	>20		Yield Point	6	X/O	160	69	.39
			Gel Strengths	2.0/3.0	X/O	160	63	.34
			pH	10.5	Shock tool-SN-M6505502	163	72	2.81
			Water Loss	10.0	X/O	167	56	.75
			Filter Cake	1	HWDP/XO	164	68	225.44
			Chlorides	5500	Jar	165	60	6.65
			Solids %	5	X/O	165	65	.88
			K + mg/l	1700	HWDP	102	68	112.35
					Drill pipe	102	62	1347.39
			KCL mg/l		Kelly down			5.57
			Daily Cost:	2497				
			Cum. Cost:	52543			TOTAL	1711

RIG TIME:

Drilling	19.00	Weld Bowl		Cement		Safety/BOP	
Rig Service	1.00	Fishing		WOC		Reaming	
Tripping		Logging		Nipple up		Slip & Cut	
Survey	3.75	Coring		PT BOP		Level sub	
Circ./Cond.	0.25	Handle 203mm		Clean rig floor		Time change	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:15	Rig service, function test annular.
00:15	06:30	Drill 215.9 mm hole from 1582 - 1641 m.
06:30	08:00	Accumulate connection and survey times.
08:00	08:30	Rig service, function test pipe rams.
08:30	15:00	Drill 215.9 mm hole from 1641 - 1694 m.
15:00	16:00	Accumulate connection and survey times.
16:00	16:15	Rig service, function test HCR valve.
16:15	22:30	Drill 215.9 mm hole from 1694 - 1711m.
22:30	23:45	Accumulate connection and survey times.
23:45	00:00	Circulate hole clean.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	22	Man Hours:	252	Cumulative per Well:	4901	Supply Trips to Rig: 55	43600	Km Driven:	Incidents: 0	
POB:	Savanna:	11	Service Comp.:	6	Pétrolia/Codeco:	4	Cumulative:	21			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	10	Daily Delivery:	0	Total Consumption:		355
Potable Water (m3):		8	Available at Rig Site:	8	Daily Consumption:	2	Daily Delivery:		Total Consumption:		26
Fuel:	90192		Available at Rig Site:	26794	Daily Consumption:	6000	Daily delivery :	9439.10	Total Consumption:		59568

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 08-Nov-09 **Day:** 17
Measured Depth (mMD/KB): 1784 m **Vertical Depth (mTVD/KB):** m **Progress:** 73 m
Drilling Hours: 6.25 Drill Rate: 11.68 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Trip out for possible motor failure or plugged jets. **Weather:** Sunny, 6 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
8	215.9	MSR616	122358	1711		73	4.25	7000	110	7 x 9.5	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1710	1730
Liner/Stroke(mm)	140/254	140/254	Overflow Density	1060	1065
SPM	95	95	Flowrate (l/m)	900	900
Volume (m3/min)	1.11	1.11	Operating Hours	24	24

Pump Pressure: 18800 **Annular Velocity (m/min): 78** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, MF Vis-1, Caustic-1.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1075	TOOL	OD	ID	LENGTH
1727.00	>20		Viscosity	45	Bit	215.9		.25
			Plastic Viscosity	12	Mud motor/XO	168		8.18
			Yield Point	4.5	X/O	160	69	.39
			Gel Strengths	1.0/2.0	X/O	160	63	.34
			pH	10.0	Shock tool-SN-M6505502	163	72	2.81
			Water Loss	9.5	X/O	167	56	.75
			Filter Cake	1	HWDP/XO	164	68	225.44
			Chlorides	5500	Jar	165	60	6.65
			Solids %	5.3	X/O	165	65	.88
			K + mg/l	1600	HWDP	102	68	112.35
					Drill pipe	102	62	1414.98
			KCL mg/l		Kelly down			10.98
			Daily Cost:	1276				
			Cum. Cost:	53819			TOTAL	1784

RIG TIME:

Drilling	6.25	Weld Bowl		Cement		Safety/BOP	
Rig Service	0.50	Fishing		WOC		Reaming	
Tripping	13.50	Logging		Nipple up		Slip & Cut	
Survey	0.50	Coring		PT BOP		Level sub	
Circ./Cond.	0.75	Handle 203mm		Pet.site tour	2.50	Time change	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:45	Circulate hole clean.
00:45	07:00	Trip out.
07:00	09:30	Tidy rig and site for public Petrolia site tour.
09:30	17:00	Make up new bit. Trip in hole, extremely slow for the public Petrolia site tour. Wash down from 1671 - 1711 m.
17:00	23:15	Drill 215.9 mm hole from 1711 - 1784 m.
23:15	23:30	Rig service, function test HCR valve.
23:30	00:00	Accumulate connection and survey times.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	23	Man Hours:	360	Cumulative per Well:	5261	Supply Trips to Rig: 55		43600 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	15	Cumulative:	30			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	1	Daily Delivery:	0	Total Consumption:		356
Potable Water (m3):		8	Available at Rig Site:	4	Daily Consumption:	1	Daily Delivery:		Total Consumption:		27
Fuel:	90192		Available at Rig Site:	20254	Daily Consumption:	6500	Daily delivery :		Total Consumption:		66068

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

PETROLIA
1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

CODECO CONSULTING 2000 INC.
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 09-Nov-09 **Day:** 18
Measured Depth (mMD/KB): 1874 m **Vertical Depth (mTVD/KB):** m **Progress:** 90 m
Drilling Hours: 7.75 Drill Rate: 11.61 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Drilling 215.9 mm hole at 1941 m. **Weather:** Cloudy, 5 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
8	215.9	MSR616	122358	1711	1807	96	10.50	7000	110	7 x 9.5	2-2-FC-A-X-0-CT-DTF
9	215.9	MSF613	126767	1807		67	5.00	7000	100	7 x 9.5	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1710	1730
Liner/Stroke(mm)	152/254	140/254	Overflow Density	1060	1065
SPM	125		Flowrate (l/m)	900	900
Volume (m3/min)	1.73		Operating Hours	24	24

Pump Pressure: 13000 **Annular Velocity (m/min): 63** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, MF Vis-1, Caustic-2, Aqua Star-1, MF Pac R-1.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1060	TOOL	OD	ID	LENGTH
1773.00	>20		Viscosity	48	Bit	215.9		.25
1822.00	>20		Plastic Viscosity	12	Mud motor	181		9.03
			Yield Point	6.5	Shock tool-SN-	165	72	2.81
			Gel Strengths	2.0/4.0	Drill collars	165	60	131.01
			pH	10.5	Jar	165	60	6.65
			Water Loss	9.5	X/O	166	56	8
			Filter Cake	1	HWDP	102	68	93.62
			Chlorides	4500	Drill pipe	102	62	1616.95
			Solids %	4.2				
			K + mg/l	1200				
			KCL mg/l		Kelly down			12.88
			Daily Cost:	1655				
			Cum. Cost:	55474			TOTAL	1874

RIG TIME:

Drilling	7.75	Weld Bowl		Cement		Safety/BOP	
Rig Service	0.50	Fishing		WOC		Reaming	
Tripping	13.50	Logging		Nipple up		Slip & Cut	
Survey	1.25	Coring		PT BOP		Level sub	
Circ./Cond.	1.00	Handle 203mm		Pet.site tour		Time change	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:15	Rig service, function test annular.
00:15	03:00	Drill 215.9 mm hole from 1784 - 1807 m.
03:00	04:00	Circulate hole clean.
04:00	11:00	Trip out. Lay down failed mud motor, 30 joints of HWDP and shock tool.
11:00	12:00	Make up new BHA, pick up 14 x 165 mm drill collars.
12:00	17:30	Trip in hole. Wash down from 1777 - 1807 m.
17:30	17:45	Rig service, function test HCR valve.
17:45	22:45	Drill 215.9 mm hole from 1807 - 1874 m.
22:45	00:00	Accumulate connection and survey times.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size: 244.5m x 279mm** **Rating: 21000 kPa**

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	24	Man Hours:	216	Cumulative per Well:	5477	Supply Trips to Rig:	56	44600	Km Driven:	Incidents:	0	
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	3	Cumulative:	18					
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	30	Daily Delivery:	0	Total Consumption:			386	
Potable Water (m3):		8	Available at Rig Site:	2	Daily Consumption:	2	Daily Delivery:		Total Consumption:			29	
Fuel:	90192		Available at Rig Site:		Daily Consumption:	6500	Daily delivery :		Total Consumption:			72658	

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

1305, boulevard Lebourgneuf
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DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 10-Nov-09 **Day:** 19
Measured Depth (mMD/KB): 1986 m **Vertical Depth (mTVD/KB):** m **Progress:** 112 m
Drilling Hours: 15.25 Drill Rate: 7.30 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Bit trip. **Weather:** Cloudy, 3 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
9	215.9	MSF613	126767	1807	1986	179	20.25	10000	110	7 x 9.5	3-5-FC-S-X-0-CT-PR

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1715	1705
Liner/Stroke(mm)	152/254	140/254	Overflow Density	1060	1055
SPM	125		Flowrate (l/m)	900	900
Volume (m3/min)	1.73		Operating Hours	24	24

Pump Pressure: 13400 **Annular Velocity (m/min): 63** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, MF Vis-7, Caustic-4, Aqua Star-2, MF Pac R-2, Corinox-1.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1070	TOOL	OD	ID	LENGTH
1871.00	>20		Viscosity	53	Bit	215.9		.25
1919.00	>20		Plastic Viscosity	13	Mud motor	181		9.03
			Yield Point	9.5	Shock tool-SN-	165	72	2.81
			Gel Strengths	4.0/6.0	Drill collars	165	60	131.01
			pH	10.5	Jar	165	60	6.65
			Water Loss	10.0	X/O	166	56	.80
			Filter Cake	1	HWDP	102	68	103.02
			Chlorides	4500	Drill pipe	102	62	1722.76
			Solids %	4.5				
			K + mg/l	1100				
			KCL mg/l		Kelly down			9.67
			Daily Cost:	4134				
			Cum. Cost:	59608			TOTAL	1986

RIG TIME:

Drilling	15.25	Weld Bowl		Cement		Safety/BOP	
Rig Service	0.50	Fishing		WOC		Reaming	
Tripping	4.25	Logging		Nipple up		Slip & Cut	
Survey	2.25	Coring		BOP drill	0.25	Level sub	
Circ./Cond.	1.50	Handle 203mm		Pet.site tour		Time change	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:15	Rig service, function test annular.
00:15	06:45	Drill 215.9 mm hole from 1874 - 1942 m.
06:45	08:00	Accumulate survey and connection times.
08:00	08:15	Rig service, function test pipe rams.
08:15	15:00	Drill 215.9 mm hole from 1942 - 1985 m.
15:00	16:00	Accumulate survey and connection times.
16:00	18:00	Drill 215.9 mm hole from 1985 - 1986 m.
18:00	19:30	Circulate hole clean.
19:30	19:45	BOP drill with crew, well secured in 95 seconds.
19:45	00:00	Trip out for bit. Pump out singles from 1986 - 1545 m.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	25	Man Hours:	216	Cumulative per Well:	5693	Supply Trips to Rig:	57	45600	Km Driven:	Incidents:	0	
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	3	Cumulative:	18					
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	10	Daily Delivery:	0	Total Consumption:			396	
Potable Water (m3):		8	Available at Rig Site:	8	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:			31	
Fuel:	90192		Available at Rig Site:	13450	Daily Consumption:	4084	Daily delivery :		Total Consumption:			76742	

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 11-Nov-09 **Day:** 20
Measured Depth (mMD/KB): 2007 m **Vertical Depth (mTVD/KB):** m **Progress:** 21 m
Drilling Hours: 5.75 Drill Rate: 3.65 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Control drilling 215.9 mm hole at 2021 m. **Weather:** Cloudy -5 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
10	215.9	RSR616	125069	1986		21	5.75	5000	110	7 x 9.5	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1690	1680
Liner/Stroke(mm)	152/254	140/254	Overflow Density	1045	1050
SPM	120		Flowrate (l/m)	900	900
Volume (m3/min)	1.66		Operating Hours	24	24

Pump Pressure: 12100 **Annular Velocity (m/min): 60** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1,MF vis 1, caustic 2, brentag 352 1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1065	TOOL	OD	ID	LENGTH
1445.00	21.00		Viscosity	51	Bit	215.9		.25
1580.00	29.00		Plastic Viscosity	12	Mud motor	181		9.03
1714.00	39.50		Yield Point	9.5	Shock tool-SN-CSS07A01	165	72	2.81
1848.00	40.00		Gel Strengths	3.0/5.0	X/O	165	60	.80
1964.00	42.00		pH	10.5	HWDP	102	60	299.63
			Water Loss	10.0	X/O	165	56	.89
			Filter Cake	1	Jars	165	68	6.65
			Chlorides	5500	X/O	166	62	.70
			Solids %	4.6	HWDP	102	63	74.9
			K + mg/l	1700	Drill pipe	102		1597.87
			KCL mg/l		Kelly down			13.47
			Daily Cost:	1651				
			Cum. Cost:	61259			TOTAL	2007

RIG TIME:

Drilling	5.75	Weld Bowl		Cement		Safety/BOP	0.50
Rig Service	0.50	Fishing		WOC		Reaming	
Tripping	12.75	Logging		Nipple up		Slip & Cut	1.00
Survey	3.50	Coring		BOP drill		Level sub	
Circ./Cond.		Handle 203mm		Pet.site tour		Time change	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	05:45	Trip out, lay down drill collars.
05:45	06:00	Rig service, function test blind rams.
06:00	08:00	Make up new PDC bit, pick up HWDP.
08:00	08:15	Safety meeting with new crew.
08:15	09:15	Pick up HWDP, trip in hole.
09:15	09:30	BOP drill, well secured n 120 seconds.
09:30	10:30	Slip and cut drill line.
10:30	13:15	Trip in hole.
13:15	16:00	Accumulate survey time.
16:00	17:15	Trip in hole, wash down from 1966 m - 1986 m.
17:15	17:30	Rig service, function test HCR valve.
17:30	23:15	Control drill 215.9 mm hole from 1986 m - 2007 m.
23:15	00:00	Wireline survey.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size: 244.5m x 279mm** **Rating: 21000** kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	26	Man Hours:	216	Cumulative per Well:	5909	Supply Trips to Rig: 59		47600 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	3	Cumulative:	18			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	10	Daily Delivery:	0	Total Consumption:		406
Potable Water (m3):		8	Available at Rig Site:	4	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:		33
Fuel:	105420		Available at Rig Site:	9838	Daily Consumption:	6000	Daily delivery :	15228	Total Consumption:		82742

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
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DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 12-Nov-09 **Day:** 21
Measured Depth (mMD/KB): 2026 m **Vertical Depth (mTVD/KB):** m **Progress:** 19 m
Drilling Hours: 9.00 Drill Rate: 2.10 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Drilling 215.9 mm hole at 2048 m. **Weather:** Sunny, -5 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
10	215.9	RSR616	125069	1986	2026	40	14.75	10000	110	7 x 9.5	6-7-FC-A-X-0-CT-PR
11	215.9	R34ADH	BX3120	2026						3 x 12.7	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1600	1600
Liner/Stroke(mm)	152/254	140/254	Overflow Density	1045	1050
SPM	120		Flowrate (l/m)	900	900
Volume (m3/min)	1.66		Operating Hours	12	12

Pump Pressure: 13000 **Annular Velocity (m/min): 60** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, Defoamer-1, Caustic-1, Aquastar-1, Pac R-1.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1060	TOOL	OD	ID	LENGTH
2003.00	38.00		Viscosity	48	Bit	215.9		.25
			Plastic Viscosity	11	Mud motor	181		9.03
			Yield Point	8.5	Shock tool-SN-CSS07A01	165	72	2.81
			Gel Strengths	2.0/4.0	X/O	165	60	.80
			pH	10.5	HWDP	102	60	299.63
			Water Loss	9.5	X/O	165	56	.89
			Filter Cake	1	Jars	165	68	6.65
			Chlorides	4500	X/O	166	62	.70
			Solids %	4.2	HWDP	102	63	74.9
			K + mg/l	1060	Drill pipe	102		1617.28
			KCL mg/l		Kelly down			13.06
			Daily Cost:	1379				
			Cum. Cost:	62638			TOTAL	2026

RIG TIME:

Drilling	9.00	Weld Bowl		Cement		Safety/BOP	
Rig Service	0.75	Fishing		WOC		Reaming	
Tripping	10.25	Logging		Nipple up		Slip & Cut	
Survey	2.25	Coring		BOP drill		Level sub	
Circ./Cond.	1.75	Handle 203mm		Pet.site tour		Time change	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:15	Rig service, function test pipe rams.
00:15	04:00	Control drill 215.9 mm hole from 2007 - 2016 m.
04:00	05:30	Run 2 wireline surveys, both misruns.
05:30	08:00	Drill 215.9 mm hole from 2016 - 2023 m.
08:00	08:15	Rig service, function test pipe rams.
08:15	11:00	Drill 215.9 mm hole from 2023 - 2026 m.
11:00	11:45	Wireline survey.
11:45	12:45	Circulate hole clean.
12:45	17:15	Trip out for bit.
17:15	17:30	Rig service, function test blind rams.
17:30	00:00	Make up new bit, trip in hole, break circulation at 1050 m. Wash down from 1993 - 2022 m.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	27	Man Hours:	216	Cumulative per Well:	6125	Supply Trips to Rig: 60		4800 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	3	Cumulative:	18			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	20	Daily Delivery:		0 Total Consumption:		426
Potable Water (m3):		8	Available at Rig Site:	8	Daily Consumption:	2	Daily Delivery:		8 Total Consumption:		35
Fuel:	105420		Available at Rig Site:	19545	Daily Consumption:	3133	Daily delivery :		Total Consumption:		85875

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

1305, boulevard Lebourgneuf
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DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 13-Nov-09 **Day:** 22
Measured Depth (mMD/KB): 2089 m **Vertical Depth (mTVD/KB):** m **Progress:** 63 m
Drilling Hours: 20.75 Drill Rate: 3.00 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Drilling 215.9 mm hole at 2105 m. **Weather:** Cloudy -2 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
11	215.9	R34ADH	BX3120	2026		63	20.25	14000	110	3 x 12.7	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1680	1690
Liner/Stroke(mm)	152/254	140/254	Overflow Density	1040	1040
SPM	120		Flowrate (l/m)	900	900
Volume (m3/min)	1.4		Operating Hours	24	24

Pump Pressure: 9500 **Annular Velocity (m/min): 48** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, defoamer 1, caustic 5, MF vis 4, MF pac R 4, corinox 1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1060	TOOL	OD	ID	LENGTH
2032.00	37.00		Viscosity	50	Bit	215.9		.25
			Plastic Viscosity	11	Mud motor	181		9.03
			Yield Point	8.5	Shock tool-SN-CSS07A01	165	72	2.81
			Gel Strengths	3.5/6.0	X/O	165	60	.80
			pH	10.5	HWDP	102	60	299.63
			Water Loss	9.0	X/O	165	56	.89
			Filter Cake	1	Jars	165	68	6.65
			Chlorides	5000	X/O	166	62	.70
			Solids %	4.2	HWDP	102	63	74.9
			K + mg/l	930	Drill pipe	102		1684.55
			KCL mg/l		Kelly down			8.79
			Daily Cost:	3480				
			Cum. Cost:	66118			TOTAL	2089

RIG TIME:

Drilling	20.25	Weld Bowl		Cement		Safety/BOP	
Rig Service	0.75	Fishing		WOC		Reaming	1.50
Tripping		Logging		Nipple up		Slip & Cut	
Survey	1.00	Coring		BOP drill		Level sub	
Circ./Cond.	0.50	Handle 203mm		Pet.site tour		Time change	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	01:30	Wash and ream down from 2022 m - 2026 m.
01:30	04:15	Drill 215.9 mm hole from 2026 m - 2036 m.
04:15	04:30	Rig service, function test HCR valve.
04:30	07:45	Drill 215.9 mm hole from 2036 m - 2050 m.
07:45	08:00	Accumulate connection time.
08:00	08:15	Rig service, function test pipe rams.
08:15	15:00	Drill 215.9 mm hole from 2050 m - 2070 m.
15:00	16:00	Wireline survey and connection time.
16:00	16:15	Rig service, function test annular.
16:15	23:45	Drill 215.9 mm hole from 2070 m - 2089 m.
23:45	00:00	Accumulate connection time.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size: 244.5m x 279mm** **Rating: 21000 kPa**

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	28	Man Hours:	216	Cumulative per Well:	6341	Supply Trips to Rig: 63		55000 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	3	Cumulative:	18			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	10	Daily Delivery:	0	Total Consumption:		436
Potable Water (m3):		8	Available at Rig Site:	4	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:		37
Fuel:		105420	Available at Rig Site:	14561	Daily Consumption:	4984	Daily delivery :		Total Consumption:		90859

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

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DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 14-Nov-09 **Day:** 23
Measured Depth (mMD/KB): 2143 m **Vertical Depth (mTVD/KB):** m **Progress:** 54 m
Drilling Hours: 18.50 Drill Rate: 2.90 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Run in hole with bit #12. **Weather:** Overcast, rain 6 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
11	215.9	R34ADH	BX3120	2026	2143	117	34.25	14000	110	3 x 12.7	8-8-CT-N-F-2-FC-DTF
12	215.9	R40ADPH	AC4471	2143						3 x 12.7	tripping

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1690	1700
Liner/Stroke(mm)	152/254	140/254	Overflow Density	1050	1050
SPM	120		Flowrate (l/m)	900	900
Volume (m3/min)	1.4		Operating Hours	24	24

Pump Pressure: 10500 **Annular Velocity (m/min): 48** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1,caustic 3, MF vis 4, calcium nitrate 11, zetag 7692 6, alkapam 1103 1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1060	TOOL	OD	ID	LENGTH
2080.00	37.00		Viscosity	50	Bit	215.9		.25
			Plastic Viscosity	11	Mud motor	181		9.03
			Yield Point	9	Shock tool-SN-CSS07A01	165	72	2.81
			Gel Strengths	3.0/6.0	X/O	165	60	.80
			pH	10.0	HWDP	102	60	299.63
			Water Loss	9.0	X/O	165	56	.89
			Filter Cake	1	Jars	165	68	6.65
			Chlorides	5000	X/O	166	62	.70
			Solids %	4.2	HWDP	102	63	74.9
			K + mg/l	930	Drill pipe	102		1742.52
			KCL mg/l		Kelly down			5.26
			Daily Cost:	5726				
			Cum. Cost:	71844			TOTAL	2143

RIG TIME:

Drilling	18.50	Weld Bowl		Cement		Safety/BOP	
Rig Service	0.75	Fishing		WOC		Reaming	
Tripping	2.25	Logging		Nipple up		Slip & Cut	
Survey	1.50	Coring		BOP drill		Level sub	
Circ./Cond.	1.00	Handle 203mm		Pet.site tour		Time change	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	02:15	Drill 215.9 mm hole from 2089 m - 2093 m.
02:15	02:30	Rig service, function test annular.
02:30	07:00	Drill 215.9 mm hole from 2093 m - 2106 m.
07:00	08:00	Wireline survey and connection time.
08:00	08:15	Rig service, function test pipe rams.
08:15	15:30	Drill 215.9 mm hole from 2106 m - 2126 m.
15:30	16:00	Wireline survey.
16:00	20:30	Drill 215.9 mm hole from 2126 m - 2143 m.
20:30	20:45	Rig service, function test pipe rams.
20:45	21:45	Circulate hole clean.
21:45	00:00	Trip out for bit.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	29	Man Hours:	216	Cumulative per Well:	6557	Supply Trips to Rig:	64	56000 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	3	Cumulative:	18			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	10	Daily Delivery:	0	Total Consumption:		436
Potable Water (m3):		8	Available at Rig Site:	4	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:		39
Fuel:	**105420**		Available at Rig Site:	11561	Daily Consumption:	3000	Daily delivery :		Total Consumption:		93859

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

PETROLIA
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Fax: (418) 657-1880

DAILY DRILLING REPORT

CODECO CONSULTING SERVICES INC.
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 15-Nov-09 **Day:** 24
Measured Depth (mMD/KB): 2169 m **Vertical Depth (mTVD/KB):** m **Progress:** 26 m
Drilling Hours: 10.50 Drill Rate: 2.47 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Drilling 215.9 mm hole at 2185 m. **Weather:** Cloudy 4 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
12	215.9	R40ADPH	AC4471	2143		26	10.50	14000	110	3 x 12.7	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1700	1700
Liner/Stroke(mm)	152/254	140/254	Overflow Density	1060	1060
SPM	130		Flowrate (l/m)	900	900
Volume (m3/min)	1.8		Operating Hours	12	12

Pump Pressure: 13000 **Annular Velocity (m/min): 63** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1085	TOOL	OD	ID	LENGTH
			Viscosity	48	Bit	215.9		.25
			Plastic Viscosity	11	Mud motor/2-X/O	181		9.69
			Yield Point	9	Shock tool-SN-CSS07A01	165	72	2.81
			Gel Strengths	4.0/5.0	X/O	165	60	.80
			pH	10.5	HWDP	102	60	299.63
			Water Loss	9.0	X/O	165	56	.89
			Filter Cake	1	Jars	165	68	6.65
			Chlorides	17000	X/O	166	62	.70
			Solids %	6	HWDP	102	63	74.9
			K + mg/l	17800	Drill pipe	102		1761.48
			KCL mg/l		Kelly down			11.2
			Daily Cost:	900				
			Cum. Cost:	72744			TOTAL	2169

RIG TIME:

Drilling	10.50	Weld Bowl		Cement		Safety/BOP	
Rig Service	0.50	Fishing		WOC		Reaming	1.75
Tripping	10.50	Logging		Nipple up		Slip & Cut	
Survey		Coring		BOP drill		Level sub	
Circ./Cond.		Handle 203mm		Pet.site tour		Connect. time	0.75
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	03:15	Trip out for bit. Lay down mud motor.
03:15	10:30	Make up new mud motor and bit, trip in hole. Wash down from 2025 m - 2120 m.
10:30	12:15	Ream undergauge hole from 2120 m - 2043 m.
12:15	12:30	Rig service, function test pipe rams.
12:30	15:45	Drill 215.9 mm hole from 2143 m - 2152 m.
15:45	16:00	Accumulate connection time.
16:00	16:15	Rig service, function test annular.
16:15	23:30	Drill 215.9 mm hole from 2152 m - 2169 m.
23:30	00:00	Accumulate connection time.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	30	Man Hours:	216	Cumulative per Well:	6773	Supply Trips to Rig:	64	56000 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	3	Cumulative:	18			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	10	Daily Delivery:	0	Total Consumption:		446
Potable Water (m3):		8	Available at Rig Site:	0	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:		41
Fuel:	105420		Available at Rig Site:	7736	Daily Consumption:	3825	Daily delivery :		Total Consumption:		97684

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 16-Nov-09 **Day:** 25
Measured Depth (mMD/KB): 2200 m **Vertical Depth (mTVD/KB):** m **Progress:** 31 m
Drilling Hours: 15.00 Drill Rate: 2.06 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Open hole logging with Schlumberger. **Weather:** Cloudy, 10 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
12	215.9	R40ADPH	AC4471	2143	2200	57	25.50	14000	110	3 x 12.7	2-5-FC-A-E-0-CT-TD

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	152/254	140/254	Overflow Density		
SPM	130		Flowrate (l/m)		
Volume (m3/min)	1.8		Operating Hours		

Pump Pressure: 13000 **Annular Velocity (m/min): 63** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, Potash-256, MF Vis-16, Lignite-2, Aqua Star-1, Caustic-5, MF Pac R-1.

SURVEYS

Depth (mMD)	Inclination (deg)	Direction (deg)
2177.00	34.00	

MUD

Mud Weight	1110
Viscosity	58
Plastic Viscosity	12
Yield Point	15
Gel Strengths	6.0/8.0
pH	10.5
Water Loss	8.5
Filter Cake	1
Chlorides	29000
Solids %	7.8
K + mg/l	32300
KCL mg/l	61300
Daily Cost:	19409
Cum. Cost:	92153

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
Bit	215.9		.25
Mud motor/2-X/O	181		9.69
Shock tool-SN-CSS07A01	165	72	2.81
X/O	165	60	.80
HWDP	102	60	299.63
X/O	165	56	.89
Jars	165	68	6.65
X/O	166	62	.70
HWDP	102	63	74.9
Drill pipe	102		1790.13
Kelly down			13.55
		TOTAL	2200

RIG TIME:

Drilling	15.00	Weld Bowl		Cement		Safety/BOP	
Rig Service	0.50	Fishing		WOC		Reaming	
Tripping	3.75	Logging		Nipple up		Slip & Cut	
Survey	1.50	Coring		BOP drill		Level sub	
Circ./Cond.	2.75	Handle 203mm		Pet.site tour		Connect. time	0.50
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:15	Rig service, function test annular.
00:15	07:45	Drill 215.9 mm hole from 2169 - 2186 m.
07:45	08:00	Accumulate connection time.
08:00	15:30	Drill 215.9 mm hole from 2186 - 2200 m.
15:30	15:45	Accumulate connection time.
15:45	16:00	Rig service, function test pipe rams.
16:00	16:30	Circulate up bottom hole sample.
16:30	18:00	Wireline survey. First run misrun.
18:00	18:15	Circulate.
18:15	19:00	Wiper trip from 2200 - 2130 m.
19:00	21:00	Circulate hole clean.
21:00	00:00	Trip out to log.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	31	Man Hours:	252	Cumulative per Well:	7025	Supply Trips to Rig:	66	58400 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	7	Pétrolia/Codeco:	3	Cumulative:	21			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	5	Daily Delivery:	0	Total Consumption:		451
Potable Water (m3):		8	Available at Rig Site:	8	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:		43
Fuel:	120329		Available at Rig Site:	16605	Daily Consumption:	5945	Daily delivery :	14909	Total Consumption:		103628

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 17-Nov-09 **Day:** 26
Measured Depth (mMD/KB): 2200 m **Vertical Depth (mTVD/KB):** 2005 m **Progress:** ____ m
Drilling Hours: ____ Drill Rate: ____ m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Open hole logging with Schlumberger. **Weather:** Cloudy, -3 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
12	215.9	R40ADPH	AC4471							3 x 12.7	2-5-FC-A-E-0-CT-TD

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	152/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min): 63** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1110	TOOL	OD	ID	LENGTH
			Viscosity	58	Bit	215.9		.25
			Plastic Viscosity	12	Mud motor/2-X/O	181		9.69
			Yield Point	15	Shock tool-SN-CSS07A01	165	72	2.81
			Gel Strengths	6.0/8.0	X/O	165	60	.80
			pH	10.5	HWDP	102	60	299.63
			Water Loss	8.5	X/O	165	56	.89
			Filter Cake	1	Jars	165	68	6.65
			Chlorides	29000	X/O	166	62	.70
			Solids %	7.8	HWDP	102	63	74.9
			K + mg/l	32300	Drill pipe	102		1790.13
			KCL mg/l	61300	Kelly down			13.55
			Daily Cost:	900				
			Cum. Cost:	93053			TOTAL	2200

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	0.25
Rig Service		Fishing		WOC		Reaming	
Tripping	2.75	Logging	21.00	Nipple up		Slip & Cut	
Survey		Coring		BOP drill		Level sub	
Circ./Cond.		Handle 203mm		Pet.site tour		Connect. time	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	02:45	Trip out.
02:45	03:00	Safety meeting.
03:00	05:00	Rig in Schlumberger.
05:00	00:00	Run open hole logs with Schlumberger. Log # 1: NGS-HRLT-CAL. Loggers depth 2202 m, on bottom at 0800 hours.
		Run log # 2: HCMS-HGS at 1430 hours, on bottom at 1600 hours, on surface at 2100 hours.
		Run log # 3: FMI-DSI at 2400 hours.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size: 244.5m x 279mm** **Rating: 21000 kPa**

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. ____ mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	32	Man Hours:	276	Cumulative per Well:	7301	Supply Trips to Rig: 66		58400 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	7	Pétrolia/Codeco:	5	Cumulative:	23			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	1	Daily Delivery:	0	Total Consumption:		452
Potable Water (m3):		8	Available at Rig Site:	6	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:		45
Fuel:	**120329**		Available at Rig Site:	14732	Daily Consumption:	1873	Daily delivery :		Total Consumption:		105501

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: ____ Well Licence : 2009FC135

PETROLIA
1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

CODECO CONSULTING GROUP INC.
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 18-Nov-09 **Day:** 27
Measured Depth (mMD/KB): 2200 m **Vertical Depth (mTVD/KB):** 2005 m **Progress:** ____ m
Drilling Hours: ____ Drill Rate: ____ m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Make up test tools for DST 1. **Weather:** Sunny, -2 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	152/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min): 63** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1110	TOOL	OD	ID	LENGTH
			Viscosity	58				
			Plastic Viscosity	12				
			Yield Point	15				
			Gel Strengths	6.0/8.0				
			pH	10.5				
			Water Loss	8.5				
			Filter Cake	1				
			Chlorides	29000				
			Solids %	7.8				
			K + mg/l	32300				
			KCL mg/l	61300				
			Daily Cost:	900				
			Cum. Cost:	93953			TOTAL	

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	
Rig Service		Fishing		WOC		Reaming	
Tripping		Logging	24.00	Nipple up		Slip & Cut	
Survey		Coring		BOP drill		Level sub	
Circ./Cond.		Handle 203mm		Pet.site tour		Connect. time	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:00	Run open hole logs with Schlumberger. Log # 3: FMI-DSI, on bottom at 0300 hours, at surface at 1115 hours.
		Run log # 4: CMR-GR-PPC at 1245 hours, at surface at 2100 hours.
		Run log # 5 coring tool at 2200 hours.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size: 244.5m x 279mm** **Rating: 21000** kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. ____ mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	33	Man Hours:	276	Cumulative per Well:	7577	Supply Trips to Rig:	66	58400 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	7	Pétrolia/Codeco:	5	Cumulative:	23			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	1	Daily Delivery:	0	Total Consumption:		453
Potable Water (m3):		8	Available at Rig Site:	4	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:		47
Fuel:	120329		Available at Rig Site:	13177	Daily Consumption:	1747	Daily delivery :		Total Consumption:		107152

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: ____ Well Licence: 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 19-Nov-09 **Day:** 28
Measured Depth (mMD/KB): 2200 m **Vertical Depth (mTVD/KB):** 2005 m **Progress:** m
Drilling Hours: Drill Rate: m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Trip out with DST. **Weather:** Cloudy, -4 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	152/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min): 63** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1110	TOOL	OD	ID	LENGTH
			Viscosity	58				
			Plastic Viscosity	12				
			Yield Point	15				
			Gel Strengths	6.0/8.0				
			pH	10.5				
			Water Loss	8.5				
			Filter Cake	1				
			Chlorides	29000				
			Solids %	7.8				
			K + mg/l	32300				
			KCL mg/l	61300				
			Daily Cost:	900				
			Cum. Cost:	94853			TOTAL	

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	1.00
Rig Service		Fishing		WOC		Reaming	
Tripping	0.75	Logging	5.00	Nipple up		Slip & Cut	
Survey		Coring		BOP drill		Level sub	
Circ./Cond.		Handle 203mm		DST	17.25	Connect. time	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	05:00	Schlumberger ran log # 5 coring tool. Tools out of hole at 0330 hours. Recovered 14 out 15 cores. Rig out loggers.
05:00	05:45	Lay down mud motor and shock tool from derrick.
05:45	06:00	Safety meeting with tester and crew.
06:00	08:00	Make up test tools.
08:00	08:15	Hand-over/pretour safety meeting.
08:15	10:15	Make up test tools.
10:15	16:00	Run in hole with test tools.
16:00	16:15	Safety meeting with all personnel prior to performing DST 1.
16:15	00:00	Run DST 1.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** **Cameron/IC-9/SN 110728311-1** **Size: 244.5m x 279mm** **Rating: 21000** kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	34	Man Hours:	276	Cumulative per Well:	7853	Supply Trips to Rig: 67		59400 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	8	Pétrolia/Codeco:	4	Cumulative:	23			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	1	Daily Delivery:	0	Total Consumption:		454
Potable Water (m3):		8	Available at Rig Site:	2	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:		49
Fuel:		120329	Available at Rig Site:	11501	Daily Consumption:	1676	Daily delivery :		Total Consumption:		108828

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
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Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 20-Nov-09 **Day:** 29
Measured Depth (mMD/KB): 2200 m **Vertical Depth (mTVD/KB):** 2005 m **Progress:** m
Drilling Hours: Drill Rate: m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Running DST #2. **Weather:** Cloudy 3 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	152/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1110	TOOL	OD	ID	LENGTH
			Viscosity	58				
			Plastic Viscosity	12				
			Yield Point	15				
			Gel Strengths	6.0/8.0				
			pH	10.5				
			Water Loss	8.5				
			Filter Cake	1				
			Chlorides	29000				
			Solids %	7.8				
			K + mg/l	32300				
			KCL mg/l	61300				
			Daily Cost:	900				
			Cum. Cost:	94853			TOTAL	

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	0.75
Rig Service	0.25	Fishing		WOC		Reaming	
Tripping	8.25	Logging		Nipple up		Slip & Cut	
Survey		Coring		BOP drill		Level sub	
Circ./Cond.		Handle 203mm		DST	14.75	Connect. time	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	06:15	Running DST #1.
06:15	06:30	Safety meeting.
06:30	14:30	Trip out with DST #1. Recover recorders, service test tools.
14:30	15:00	Safety meeting. Held BOP drill while out of hole, well secured in 102 seconds.
15:00	15:15	Rig service, function test blind rams.
15:15	22:45	Make up test tools, run in hole for DST #2, rig in surface equipment.
22:45	00:00	Held safety meeting with crew, perform DST #2, straddle test, interval from 1534 m - 1584 m MD.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	35	Man Hours:	228	Cumulative per Well:	8081	Supply Trips to Rig:	67	59400	Km Driven:	Incidents:	0	
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	4	Cumulative:	19					
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	1	Daily Delivery:	0	Total Consumption:			455	
Potable Water (m3):		8	Available at Rig Site:	6	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:			51	
Fuel:	134210		Available at Rig Site:	22820	Daily Consumption:	2562	Daily delivery :	13881	Total Consumption:			111390	

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 21-Nov-09 **Day:** 30
Measured Depth (mMD/KB): 2200 m **Vertical Depth (mTVD/KB):** 1988 m **Progress:** m
Drilling Hours: Drill Rate: m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Circulate, condition hole and mud for 177.8 mm casing. **Weather:** Cloudy 4 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	152/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1110	TOOL	OD	ID	LENGTH
			Viscosity	58				
			Plastic Viscosity	12				
			Yield Point	15				
			Gel Strengths	6.0/8.0				
			pH	10.5				
			Water Loss	8.5				
			Filter Cake	1				
			Chlorides	29000				
			Solids %	7.8				
			K + mg/l	32300				
			KCL mg/l	61300				
			Daily Cost:	900				
			Cum. Cost:	95753			TOTAL	

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	
Rig Service		Fishing		WOC		Reaming	
Tripping	6.00	Logging		Nipple up		Slip & Cut	0.75
Survey		Coring		BOP drill		Level sub	
Circ./Cond.		Handle test too	4.25	DST	13.00	Connect. time	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	13:00	Run DST #2. Held safety meeting with crew.
13:00	21:45	Trip out with DST #2. Recover recorders, service test tools, lay down same.
21:45	22:45	Make up BHA, trip in hole.
22:45	23:30	Safety meeting, slip and cut drill line.
23:30	00:00	Trip in hole.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	36	Man Hours:	228	Cumulative per Well:	8309	Supply Trips to Rig:	67	59400	Km Driven:	Incidents: 0
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	4	Cumulative:	19			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	5	Daily Delivery:	0	Total Consumption:		460
Potable Water (m3):		8	Available at Rig Site:	4	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:		53
Fuel:	134210		Available at Rig Site:	20877	Daily Consumption:	1943	Daily delivery :	0	Total Consumption:		113333

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

PETROLIA
1305, boulevard Lebourgneuf
Bureau 302
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CODECO CONSULTING (2000) INC.
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

DAILY DRILLING REPORT

Well Name: Pétrolia, Tarpoint N°1 **Date:** 22-Nov-09 **Day:** 31
Measured Depth (mMD/KB): 2200 m **Vertical Depth (mTVD/KB):** 1988 m **Progress:** m
Drilling Hours: Drill Rate: m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Circulating 177.8 mm casing at 1483 m. **Weather:** Sunny, -6 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	152/254	140/254	Overflow Density		
SPM		80	Flowrate (l/m)		
Volume (m3/min)		0.936	Operating Hours		

Pump Pressure: 2700 **Annular Velocity (m/min):** 79 **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1110	TOOL	OD	ID	LENGTH
			Viscosity	48				
			Plastic Viscosity	14				
			Yield Point	12.5				
			Gel Strengths	5.0/8.0				
			pH	10.5				
			Water Loss	9.0				
			Filter Cake	1				
			Chlorides	28000				
			Solids %	7.8				
			K + mg/l	30800				
			KCL mg/l	58800				
			Daily Cost:	900				
			Cum. Cost:	96653			TOTAL	

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	0.50
Rig Service	0.75	Fishing		WOC		Reaming	
Tripping	10.25	Logging		Nipple up		Slip & Cut	
Survey		Coring		BOP drill		Level sub	0.25
Circ./Cond.	8.25	Handle test too		DST		Connect. time	
Pick up BHA		Run Casing	4.00	Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:15	Rig service, function test annular.
00:15	01:30	Trip in hole.
01:30	02:30	Circulate and condition mud.
02:30	05:30	Trip in hole, wash down from 2170 - 2200 m, no fill.
05:30	08:00	Circulate and condition mud.
08:00	08:15	Rig service, function test pipe rams.
08:15	10:45	Circulate and condition mud.
10:45	11:00	Level substructure. Raise sub 25 mm on mud tank side.
11:00	13:15	Circulate and condition mud.
13:15	19:15	Trip out.
19:15	19:30	Rig service, function blind rams.
19:30	20:30	Pull wear bushing.
20:30	21:00	Rig in rig floor to run casing.
21:00	21:30	Safety meeting with crew prior to running casing.
21:30	00:00	Make up float shoe, float collar, run in hole 177.8 mm casing.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 18 Jts of 244.5 mm, 59.53 kg/m, J55 LT&C casing.
Landed at 212 mKB. Total length 214.08 meters. Marker Jt Intv. mKB
Cemented with 14 tonnes Class G cement + 2% CaCl2 + 0.2% D46.
Plug down at 23:59 hrs. On October 25/09 with 1.5 m3 cement returns.

HSE:	Exposure:	37	Man Hours:	204	Cumulative per Well:	8513	Supply Trips to Rig: 68	60400 Km Driven:	Incidents: 0		
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	2	Cumulative:	17			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:	462	
Potable Water (m3):		8	Available at Rig Site:	8	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:	55	
Fuel:	**134210**		Available at Rig Site:	17999	Daily Consumption:	2878	Daily delivery :	0	Total Consumption:	116211	

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 23-Nov-09 **Day:** 32
Measured Depth (mMD/KB): 2200 m **Vertical Depth (mTVD/KB):** 1988 m **Progress:** ____ m
Drilling Hours: ____ Drill Rate: ____ m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Circulating 177.8 mm casing at 2199 m. **Weather:** Sunny, -6 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	152/254	140/254	Overflow Density		
SPM		80	Flowrate (l/m)		
Volume (m3/min)		0.936	Operating Hours		

Pump Pressure: 3400 **Annular Velocity (m/min): 79** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1110	TOOL	OD	ID	LENGTH
			Viscosity	48				
			Plastic Viscosity	14				
			Yield Point	12.5				
			Gel Strengths	5.0/8.0				
			pH	10.5				
			Water Loss	9.0				
			Filter Cake	1				
			Chlorides	28000				
			Solids %	7.8				
			K + mg/l	30800				
			KCL mg/l	58800				
			Daily Cost:	900				
			Cum. Cost:	97553			TOTAL	

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	
Rig Service		Fishing		WOC		Reaming	
Tripping		Logging		Nipple up		Slip & Cut	
Survey		Coring		BOP drill		Level sub	
Circ./Cond.		Handle test too		DST		Connect. time	
Pick up BHA		Run Casing	24.00	Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:00	Run 177.8 mm casing. Circulate and work casing at 900, 1200, 1587, 1600, 1653, 1706, 1760, 1801, and 1911 m.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 165 Jts of 177.8 mm, 38.69 kg/m, J55 LT&C casing.
Landed at 2199 mKB. Total length 2199.71 meters. Marker Jt Intv. ____ mKB
Cemented with ____
Plug down at ____ hrs. On ____ with ____ m3 cement returns.

HSE:	Exposure:	38	Man Hours:	204	Cumulative per Well:	8717	Supply Trips to Rig:	69	61400 Km Driven:	Incidents:	0
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	2	Cumulative:	17			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	5	Daily Delivery:	0	Total Consumption:		467
Potable Water (m3):		8	Available at Rig Site:	6	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:		57
Fuel:	134210		Available at Rig Site:	15190	Daily Consumption:	2809	Daily delivery :	0	Total Consumption:		119020

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: ____ Well Licence : 2009FC135

PETROLIA
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DAILY DRILLING REPORT

CODECO
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 24-Nov-09 **Day:** 33
Measured Depth (mMD/KB): 2200 m **Vertical Depth (mTVD/KB):** 1988 m **Progress:** m
Drilling Hours: Drill Rate: m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Circulating 177.8 mm casing at 1496 m. **Weather:** Cloudy, 1 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	152/254	140/254	Overflow Density		
SPM		80	Flowrate (l/m)		
Volume (m3/min)		0.936	Operating Hours		

Pump Pressure: 2400 **Annular Velocity (m/min):** 79 **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1105	TOOL	OD	ID	LENGTH
			Viscosity	48				
			Plastic Viscosity	13				
			Yield Point	10				
			Gel Strengths	3.0/5.0				
			pH	10.5				
			Water Loss	9.0				
			Filter Cake	1				
			Chlorides	27000				
			Solids %	7.5				
			K + mg/l	29500				
			KCL mg/l	56500				
			Daily Cost:	900				
			Cum. Cost:	98453			TOTAL	

RIG TIME:

Drilling		Weld Bowl		Cement	2.75	Safety/BOP	0.25
Rig Service	0.25	Fishing		WOC		Reaming	
Tripping		Logging		Nipple up		Slip & Cut	
Survey		Coring		BOP drill		Level sub	
Circ /Cond.	18.00	Handle test too		DST		Connect. time	
Pick up BHA		Run Casing	2.75	Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	02:45	Run 177.8 mm casing to 2199 m. Circulate and work casing at 1911, 2008, and 2100 m.
		Casing ran: 177.8 mm float shoe, 177.8 mm x 38.69 kg/m J55 LT&C shoe joint, 177.8 mm float collar, 52 joints of 177.8 mm casing,
		177.8 mm stage tool, 112 joints of 177.8 mm x 38.69 kg/m J55 LT&C casing. Stage tool set at 1496.52 m, casing shoe landed at 2199 m.
02:45	03:00	Rig service, function test HCR valve.
03:00	19:15	Circulate casing at 2199 m.
19:15	22:15	Safety meeting with all personnel prior to cement job. Head up and cement first stage from 2199 - 1497 m.
22:15	00:00	Circulate casing at 1496 m. Wait on cement.
		Cement first stage as follows: Pump 3 m3 of water ahead, pressure test surface lines to 21 MPa, pump 2.3 tonnes (3 m3 of RFC lite
		1530 kg/m3 slurry) + 2.2% B810 + 1.5% DO79 followed by 13.0 tonnes (10 m3 Class "G" cement slurry mixed to 1900 kg/m3).
		Drop flimsy plug and displace casing with 43.7 m3 of KCL drilling mud. Bump plug with 4000 kPa over final circulating pressure.
		Hold for 5 minutes. Check floats, OK. Drop trip bomb, wait 30 minutes, pressure up and open stage tool with cementers. Pump 0.5 m3
		of mud through stage tool. Release cementers. Pump 25.7 m3 of KCL drill mud through stage tool with rig pump. Recover full returns
		with 6 m3 of good cement to surface.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 165 Jts of 177.8 mm, 38.69 kg/m, J55 LT&C casing.
Landed at 2199 mKB. Total length 2199.71 meters. Stage tool 1496.52 mKB
Cemented with 2.3 tonnes RFC LITE + 2.2% B810 + 1.5% DO79 followed by 13 tonnes of class G cement.
Plug down at 22:00 hrs. On 24-nov-09 with 6 m3 cement returns.

HSE:	Exposure:	39	Man Hours:	264	Cumulative per Well:	8981	Supply Trips to Rig: 72		67100 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	8	Pétrolia/Codeco:	3	Cumulative:	22			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	5	Daily Delivery:	0	Total Consumption:		472
Potable Water (m3):		8	Available at Rig Site:	4	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:		59
Fuel:		134210	Available at Rig Site:	13253	Daily Consumption:	1937	Daily delivery :	0	Total Consumption:		120957

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence 2009FC135

1305, boulevard Lebourgneuf
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DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 25-Nov-09 **Day:** 34
Measured Depth (mMD/KB): 2200 m **Vertical Depth (mTVD/KB):** 1988 m **Progress:** m
Drilling Hours: Drill Rate: m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Pressure test BOP's. **Weather:** Rain, + 3 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	152/254	140/254	Overflow Density		
SPM		85	Flowrate (l/m)		
Volume (m3/min)		0.99	Operating Hours		

Pump Pressure: 2400 **Annular Velocity (m/min): 82** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1105	TOOL	OD	ID	LENGTH
			Viscosity	48				
			Plastic Viscosity	13				
			Yield Point	10				
			Gel Strengths	3.0/5.0				
			pH	10.5				
			Water Loss	9.0				
			Filter Cake	1				
			Chlorides	27000				
			Solids %	7.5				
			K + mg/l	29500				
			KCL mg/l	56500				
			Daily Cost:	900				
			Cum. Cost:	99353			TOTAL	

RIG TIME:

Drilling		Weld Bowl		Cement	1.50	Safety/BOP	0.50
Rig Service		Fishing		WOC	22.00	Reaming	
Tripping		Logging		Nipple up		Slip & Cut	
Survey		Coring		BOP drill		Level sub	
Circ./Cond.		Handle test too		DST		Connect. time	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	09:45	Circulate casing from 1496 m. Wait on cement.
09:45	10:00	Safety meeting with all personnel prior to cement job.
10:00	11:15	Cement second stage from 1496.52 - 0 m.
		Cement data: Pump 3 m3 of water ahead. Pressure test surface lines to 25 MPa. Pump 22.7 tonnes (29.2 m3 of RFC lite cement
		slurry at 1530 kg/m3) + 2.2% B810 + 1.5% DO79. Drop plug and displace casing with 29.6 m3 of KCL drilling mud. Bump plug with
		8000 kPa over final circulating pressure and close stage tool. Bleed off pressure, confirm stage tool closed. Plug down at 1114 hours.
		Recovered full returns throughout with 6 m3 of good cement to surface.
11:15	00:00	Wait on cement.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 165 Jts of 177.8 mm, 38.69 kg/m, J55 LT&C casing.
Landed at 2199 mKB. Total length 2199.71 meters. Stage tool 1496.52 mKB
Cemented with 22.7 tonnes (29.2 m3 RFC lite) + 2.2% B810 + 1.5% DO79. Stage 2 from 1496.52 - 0 m.
Plug down at 11:14 hrs. On 25-nov-09 with 6 m3 cement returns.

HSE:	Exposure:	40	Man Hours:	264	Cumulative per Well:	9245	Supply Trips to Rig:	72	67100 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	8	Pétrolia/Codeco:	3	Cumulative:	22			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	5	Daily Delivery:	0	Total Consumption:		477
Potable Water (m3):		8	Available at Rig Site:	2	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:		61
Fuel:	134210		Available at Rig Site:	13253	Daily Consumption:	1937	Daily delivery:	0	Total Consumption:		120957

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12.15 hours Rig Released: Well Licence 2009FC135

PETROLIA
1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

CODECO CONSULTING (2000) INC.
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 26-Nov-09 **Day:** 35
Measured Depth (mMD/KB): 2203 m **Vertical Depth (mTVD/KB):** m **Progress:** 3 m
Drilling Hours: 1.25 Drill Rate: 2.40 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Drilling 152.4 mm hole at 2229 m. **Weather:** Rain + 3 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
13	152.4	R30APDH	PW1020	2200		3	1.25	10000	70	3 x 15.9	IN

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1715	1730
Liner/Stroke(mm)	152/254	140/254	Overflow Density	1065	1065
SPM		85	Flowrate (l/m)	800	800
Volume (m3/min)		0.99	Operating Hours	2	2

Pump Pressure: 10200 **Annular Velocity (m/min): 84** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1070	TOOL	OD	ID	LENGTH
			Viscosity	60	Bit	152		.25
			Plastic Viscosity	22	Mud motor SN-24XH47504C0R	133	72	8.62
			Yield Point	7.5	Shock tool SN-DMO-123-1	123	45	2.36
			Gel Strengths	2.0/4.0	X/O	131	67	1.11
			pH	11.5	HWDP	101	72	299.65
			Water Loss	14.0	X/O	130	60	.54
			Filter Cake	1	Jars SN-KJ75-001	123	56	4.92
			Chlorides	24000	X/O	128	61	.31
			Solids %	5	HWDP	101	72	74.88
			K + mg/l	26600	Drill pipe	101	65	1799.71
					Kelly			10.65
			KCL mg/l	50600				
			Daily Cost:	900				
			Cum. Cost:	100253			TOTAL	2203

RIG TIME:

Drilling	1.25	Weld Bowl		Cement		Safety/BOP	0.50
Rig Service	0.25	Fishing		WOC	6.00	Reaming	
Tripping	7.25	Logging		Nipple up		Slip & Cut	
Survey		Coring		BOP test	4.75	Level sub	
Circ./Cond.	0.50	Handle tools		DST		Drill float shoe	2.50
Pick up BHA		Run Casing		Rig repair	1.00	Move rig	

24 HOUR OPERATIONS

00:00	06:00	WOC. Nipple down BOPs. Set casing slips (SN-37485-18) with 72,000 daN. Cut casing leaving 279 mm stump. Nipple up BOPs.
06:00	06:15	Accumulator function test: starting pressure at 20,000 kPa, after 3 functions pressure at 15,000 kPa, recharge time in 42 seconds.
		Precharge pressure at 7000 kPa.
06:15	09:45	Pressure test BOPs and related components to 1400 kPa low, 7000 kPa high for 10 minutes each test.
09:45	12:15	Make up new BHA, trip in hole.
12:15	13:15	Replace broken cable on make up ram.
13:15	15:15	Trip in hole.
15:15	15:30	Held BOP drill with crew, well secured in 120 seconds.
15:30	16:30	Pressure test BOPs and related components 1400 kPa low, 7000 kPa high for 10 minutes each test.
16:30	17:45	Trip in hole.
17:45	18:45	Drill out stage tool at 1496.5 m.
18:45	20:15	Trip in hole.
20:15	21:30	Drill out cement, float collar and float shoe.
21:30	21:45	Held BOP drill with crew, well secured in 96 seconds.
21:45	22:00	Reboot pason computer to reconfigure samples.
22:00	22:15	Rig service, function test pipe rams.
22:15	22:45	Circulate, wash off cement from shaker screens.
22:45	00:00	Drill 152.4 mm hole from 2200 m - 2203 m.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size: 244.5m x 279mm** **Rating: 21000 kPa**

CASING SUMMARY

Ran 165 Jts of 177.8 mm, 38.69 kg/m, J55 LT&C casing.
Landed at 2199 mKB. Total length 2199.71 meters. Stage tool 1496.52 mKB
Cemented with 22.7 tonne (29.2m3 RFC lite) + 2.2% B810 + 1.5% DO79 Stage 2 from 1496.52m - 0m.
Plug down at 11:14 hrs. On Nov.25/09 with 6 m3 cement returns.

HSE:	Exposure:	41	Man Hours:	204	Cumulative per Well:	9449	Supply Trips to Rig:	72	67100 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	3	Pétrolia/Codeco:	3	Cumulative:	17			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	5	Daily Delivery:	0	Total Consumption:		482
Potable Water (m3):		8	Available at Rig Site:	6	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:		63
Fuel:		134210	Available at Rig Site:	9076	Daily Consumption:	4177	Daily delivery :	0	Total Consumption:		125134

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

PETROLIA
1305, boulevard Lebourgneuf
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DAILY DRILLING REPORT

CODECO CONSULTING DIVISION
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 27-Nov-09 **Day:** 36
Measured Depth (mMD/KB): 2281 m **Vertical Depth (mTVD/KB):** m **Progress:** 78 m
Drilling Hours: 20.00 Drill Rate: 3.90 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Drilling 152.4 mm hole at 2282 m. **Weather:** Cloudy + 3 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
13	152.4	R30APDH	PW1020	2200	2281	81	21.25	10000	70	3 x 15.9	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1715	1705
Liner/Stroke(mm)	152/254	140/254	Overflow Density	1045	1045
SPM		85	Flowrate (l/m)	900	900
Volume (m3/min)		0.99	Operating Hours	24	24

Pump Pressure: 10900 **Annular Velocity (m/min): 84** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, soda ash 4, corinox 3, lignite 5,Mfpac r 5, MF vis 3, sodium bicarb 3

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1065	TOOL	OD	ID	LENGTH
			Viscosity	51	Bit	152		.25
2252.00	36.50		Plastic Viscosity	19	Mud motor SN-24XH47504CDF	133	72	8.62
			Yield Point	6.5	Shock tool SN-DMO-123-1	123	45	2.36
			Gel Strengths	2.0/3.0	X/O	131	67	1.11
			pH	11.5	HWDP	101	72	299.65
			Water Loss	10.0	X/O	130	60	.54
			Filter Cake	1	Jars SN-KJ75-001	123	56	4.92
			Chlorides	20000	X/O	128	61	.31
			Solids %	4.2	HWDP	101	72	74.88
			K + mg/l	22300	Drill pipe	101	65	1875.78
					Kelly			13.55
			KCL mg/l	42300				
			Daily Cost:	3425				
			Cum. Cost:	103678			TOTAL	2281

RIG TIME:

Drilling	20.00	Weld Bowl		Cement		Safety/BOP	
Rig Service	0.75	Fishing		WOC		Reaming	
Tripping		Logging		Nipple up		Slip & Cut	
Survey	0.75	Coring		Leak off tes	0.25	Connection time	1.25
Circ./Cond.	1.00	Handle tools		DST		Drill float shoe	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:30	Drill 152.4 mm hole from 2203 m - 2205 m.
00:30	01:00	Circulate bottoms up.
01:00	01:15	Pressure integrity test: Surface pressure applied 6700 kPa, hold for 10 minutes, no bleed off = 14.0 kPa/m gradient.
01:15	01:30	Rig service, function test annular.
01:30	07:15	Drill 152.4 mm hole from 2205 m - 2227m .
07:15	08:00	Accumulate connection time.
08:00	08:15	Rig service, function test pipe rams.
08:15	15:45	Drill 152.4 mm hole from 2227 m - 2263 m.
15:45	16:00	Accumulate connection time.
16:00	16:15	Rig service, function test annular.
16:15	22:30	Drill 152.4 mm hole from 2263 m - 2281 m.
22:30	22:45	Accumulate connection time.
22:45	23:30	Wireline survey.
23:30	00:00	Circulate hole clean.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 165 Jts of 177.8 mm, 38.69 kg/m, J55 LT&C casing.
Landed at 2199 mKB. Total length 2199.71 meters. Stage tool 1496.52 mKB
Cemented with 22.7 tonne (29.2m3 RFC lite) + 2.2% B810 + 1.5% DO79 Stage 2 from 1496.52m - 0m.
Plug down at 11:14 hrs. On Nov.25/09 with 6 m3 cement returns.

HSE:	Exposure:	42	Man Hours:	204	Cumulative per Well:	9653	Supply Trips to Rig:	73	68100 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	3	Pétrolia/Codeco:	3	Cumulative:	17			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	5	Daily Delivery:	0	Total Consumption:		487
Potable Water (m3):		8	Available at Rig Site:	4	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:		65
Fuel:	150051		Available at Rig Site:	21001	Daily Consumption:	3916	Daily delivery :	15841	Total Consumption:		129050

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence : 2009FC135

1305, boulevard Lebourgneuf
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DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 28-Nov-09 **Day:** 37
Measured Depth (mMD/KB): 2318 m **Vertical Depth (mTVD/KB):** m **Progress:** 37 m
Drilling Hours: 7.50 Drill Rate: 4.90 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Running DST #3. **Weather:** Cloudy + 1 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
13	152.4	R30APDH	PW1020	2200	2281	81	21.25	10000	70	3 x 15.9	7-6-BT-M-E-0-FC-PR
14	152.4	MSi1613	JY7610	2281	2318	37	7.50	11000	70	6 x 10.3	4-4-FC-A-X-0-BT-PR

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1600	1600
Liner/Stroke(mm)	152/254	140/254	Overflow Density	1050	1050
SPM		80	Flowrate (l/m)	800	800
Volume (m3/min)		0.93	Operating Hours	12	12

Pump Pressure: 10500 **Annular Velocity (m/min): 79** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1,corinox 1, lignite 2, Mf pac r 2, sulphamic acid 5

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1060	TOOL	OD	ID	LENGTH
			Viscosity	50	Bit	152		.25
			Plastic Viscosity	20	Mud motor SN-24XH47504CDR	133	72	7.54
			Yield Point	6.5	Shock tool SN-DMO-123-1	123	45	2.36
			Gel Strengths	2.0/3.0	X/O	131	67	1.11
			pH	11.5	HWDP	101	72	299.65
			Water Loss	12.0	X/O	130	60	.54
			Filter Cake	1	Jars SN-KJ75-001	123	56	4.92
			Chlorides	19500	X/O	128	61	.31
			Solids %	4.2	HWDP	101	72	74.88
			K + mg/l	21700	Drill pipe	101	65	1914.22
					Kelly			12.45
			KCL mg/l	41200				
			Daily Cost:	1756				
			Cum. Cost:	105434			TOTAL	2318

RIG TIME:

Drilling	7.50	Weld Bowl		Cement		Safety/BOP	0.25
Rig Service	0.25	Fishing		WOC		Reaming	
Tripping	11.75	Logging		Nipple up		Slip & Cut	
Survey		Coring		Leak off test		Connection time	0.25
Circ./Cond.	1.50	Handle tools	2.50	DST		Drill float shoe	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:30	Circulate hole clean.
00:30	07:30	Bit trip, function test blind rams while out of hole.
07:30	08:00	Wash down from 2251 m - 2281 m.
08:00	08:15	Rig service, function test pipe rams.
08:15	15:45	Drill 152.4 mm hole from 2281 m - 2318 m.
15:45	16:00	Accumulate connection time.
16:00	17:00	Circulate hole clean.
17:00	21:15	Trip out for DST #3. Function test blind rams.
21:15	21:30	Safety meeting with crew.
21:30	00:00	Make up test tools, run in hole to 1153 m.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size: 244.5m x 279mm** **Rating: 21000** kPa

CASING SUMMARY

Ran 165 Jts of 177.8 mm, 38.69 kg/m, J55 LT&C casing.
Landed at 2199 mKB. Total length 2199.71 meters. Stage tool 1496.52 mKB
Cemented with 22.7 tonne (29.2m3 RFC lite) + 2.2% B810 + 1.5% DO79 Stage 2 from 1496.52m - 0m.
Plug down at 11:14 hrs. On Nov.25/09 with 6 m3 cement returns.

HSE:	Exposure:	43	Man Hours:	204	Cumulative per Well:	9857	Supply Trips to Rig: 74		69100 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	3	Pétrolia/Codeco:	3	Cumulative:	17			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	5	Daily Delivery:	0	Total Consumption:		492
Potable Water (m3):		8	Available at Rig Site:	8	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:		67
Fuel:	150051		Available at Rig Site:	18601	Daily Consumption:	2380	Daily delivery :	0	Total Consumption:		131430

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

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DAILY DRILLING REPORT

CODECO
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 29-Nov-09 **Day:** 38
Measured Depth (mMD/KB): 2318 m **Vertical Depth (mTVD/KB):** m **Progress:** m
Drilling Hours: Drill Rate: m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Drilling 152.4 mm hole at 2343 m. **Weather:** Cloudy -3 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
15	152.4	DSR711M-E	120043	2318				6000	70	4 x 12.7	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	127/254	140/254	Overflow Density		
SPM	105		Flowrate (l/m)		
Volume (m3/min)	1.01		Operating Hours		

Pump Pressure: 10500 **Annular Velocity (m/min):** 84 **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1060	TOOL	OD	ID	LENGTH
			Viscosity	55	Bit	152		.25
			Plastic Viscosity	21	Mud motor SN-24XH47504CDR	133	72	7.54
			Yield Point	8.5	Shock tool SN-DM475SS02	123	45	2.36
			Gel Strengths	2.0/3.0	X/O	131	67	1.11
			pH	11.0	HWDP	101	72	299.65
			Water Loss	10.0	X/O	130	60	.54
			Filter Cake	1	Jars SN-KJ75-001	123	56	4.92
			Chlorides	20000	X/O	128	61	.31
			Solids %	4.2	HWDP	101	72	74.88
			K + mg/l	21700	Drill pipe	101	65	1914.22
					Kelly			12.45
			KCL mg/l	41200				
			Daily Cost:	900				
			Cum. Cost:	106334			TOTAL	2318

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	
Rig Service		Fishing		WOC		Reaming	
Tripping	7.25	Logging		Nipple up		Slip & Cut	
Survey		Coring		Leak off test		Connection time	
Circ./Cond.		Handle tools	1.75	DST	15.00	Drill float shoe	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	02:00	Trip in hole for DST.
02:00	17:00	Head up for DST #3, hold safety meeting with crew, perform DST #3 from 2194 m - 2318.2 m.
17:00	22:15	Trip out with DST, recover recorders.
22:15	00:00	Service test tools and lay down same.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 165 Jts of 177.8 mm, 38.69 kg/m, J55 LT&C casing.
Landed at 2199 mKB. Total length 2199.71 meters. Stage tool 1496.52 mKB
Cemented with 22.7 tonne (29.2m3 RFC lite) + 2.2% B810 + 1.5% DO79 Stage 2 from 1496.52m - 0m.
Plug down at 11:14 hrs. On Nov.25/09 with 6 m3 cement returns.

HSE:	Exposure:	44	Man Hours:	216	Cumulative per Well:	10073	Supply Trips to Rig:	76	71100 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	3	Pétrolia/Codeco:	4	Cumulative:	18			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	3	Daily Delivery:	0	Total Consumption:		495
Potable Water (m3):		8	Available at Rig Site:	8	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:		69
Fuel:		150051	Available at Rig Site:	16199	Daily Consumption:	2422	Daily delivery :	0	Total Consumption:		133852

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence 2009FC135

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DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 30-Nov-09 **Day:** 39
Measured Depth (mMD/KB): 2367 m **Vertical Depth (mTVD/KB):** m **Progress:** 49 m
Drilling Hours: 9.50 Drill Rate: 5.15 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Drilling 152.4 mm hole at 2394 m. **Weather:** Cloudy, -1 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
15	152.4	DSR711M-E	120043	2318	2367	49	9.50	6000	70	4 x 12.7	3-4-FC-A-X-0-No-TQ
16	152.4	DSR908D	119473	2367						3 x 12.7 3 x 9.5	

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1600	1600
Liner/Stroke(mm)	127/254	140/254	Overflow Density	1055	1055
SPM	105		Flowrate (l/m)	800	800
Volume (m3/min)	1.01		Operating Hours	12	12

Pump Pressure:11000 **Annular Velocity (m/min): 84** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, Corinox 2.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1060	TOOL	OD	ID	LENGTH
			Viscosity	52	Bit	152		.25
2305.00	37.00		Plastic Viscosity	18	Mud motor SN-24XH47504CDR	133	72	8.62
			Yield Point	11	Shock tool SN-DM475SS02	123	45	2.36
			Gel Strengths	3.0/4.0	X/O	131	67	1.11
			pH	11.0	HWDP	101	72	299.65
			Water Loss	9.5	X/O	130	60	.54
			Filter Cake	1	Jars SN-KJ75-001	123	56	4.92
			Chlorides	19500	X/O	128	61	.31
			Solids %	4.2	HWDP	101	72	74.88
			K + mg/l	20900	Drill pipe	101	65	1961.82
					Kelly			12.9
			KCL mg/l	40400				
			Daily Cost:	1100				
			Cum. Cost:	107434			TOTAL	2367

RIG TIME:

Drilling	9.50	Weld Bowl		Cement		Safety/BOP	
Rig Service	0.75	Fishing		WOC		Reaming	
Tripping	10.50	Logging		Nipple up		Slip & Cut	0.75
Survey	0.75	Coring		Leak off test		Connection time	0.25
Circ./Cond.	0.75	Handle tools	0.75	DST		Drill float shoe	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:45	Lay down test tools.
00:45	01:00	Rig service, function test blind rams.
01:00	04:15	Make up new PDC bit and trip in hole. Wash down from 2298 - 2318 m.
04:15	07:15	Drill 152.4 mm hole from 2318 - 2342 m.
07:15	08:00	Wireline survey.
08:00	08:15	Rig service, function test annular.
08:15	14:45	Drill 152.4 mm hole from 2342 - 2367 m.
14:45	15:00	Accumulate connection time.
15:00	15:45	Circulate hole clean.
15:45	20:30	Trip out for bit.
20:30	21:15	Slip and cut drill line.
21:15	21:30	Rig service, function test blind rams.
21:30	00:00	Make up new PDC bit, trip in hole.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 165 Jts of 177.8 mm, 38.69 kg/m, J55 LT&C casing.
Landed at 2199 mKB. Total length 2199.71 meters. Stage tool 1496.52 mKB
Cemented with 22.7 tonne (29.2m3 RFC lite) + 2.2% B810 + 1.5% DO79 Stage 2 from 1496.52m - 0m.
Plug down at 11:14 hrs. On Nov.25/09 with 6 m3 cement returns.

HSE:	Exposure:	45	Man Hours:	216	Cumulative per Well:	10289	Supply Trips to Rig: 77		72100 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	3	Pétrolia/Codeco:	4	Cumulative:	18			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	3	Daily Delivery:	0	Total Consumption:		498
Potable Water (m3):		8	Available at Rig Site:	8	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:		71
Fuel:		150051	Available at Rig Site:	12435	Daily Consumption:	3764	Daily delivery :	0	Total Consumption:		137616

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 01-Dec-09 **Day:** 40
Measured Depth (mMD/KB): 2409 m **Vertical Depth (mTVD/KB):** m **Progress:** 42 m
Drilling Hours: 13.25 Drill Rate: 3.16 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Drilling 152.4 mm hole at 2434 m. **Weather:** Cloudy, -4 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
16	152.4	DSR908D	119473	2367	2409	42	13.25	12000	70	3 x 12.7 3 x 9.5	4-4-FC-A-X-0-No-PR
17	152.4	MA32YPX	JT5758	2409							

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1650	1600
Liner/Stroke(mm)	127/254	140/254	Overflow Density	1045	1045
SPM	105		Flowrate (l/m)	800	800
Volume (m3/min)	1.01		Operating Hours	12	12

Pump Pressure: 9500 **Annular Velocity (m/min): 84** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, Corinox-2, Defoamer-1.

SURVEYS

Depth (mMD)	Inclination (deg)	Direction (deg)
2353.00	37.00	

MUD

Mud Weight	1070
Viscosity	52
Plastic Viscosity	16
Yield Point	10
Gel Strengths	2.0/3.0
pH	10.5
Water Loss	9.0
Filter Cake	1
Chlorides	19000
Solids %	4.4
K + mg/l	20300
KCL mg/l	39300
Daily Cost:	1200
Cum. Cost:	108634

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
Bit	152		.25
Mud motor SN-24XH47504CDF	133	72	8.62
Shock tool SN-DM475SS02	123	45	2.36
X/O	131	67	1.11
HWDP	101	72	299.65
X/O	130	60	.54
Jars SN-KJ75-001	123	56	4.92
X/O	128	61	.31
HWDP	101	72	74.88
Drill pipe	101	65	2009.56
Kelly			6.8
		TOTAL	2409

RIG TIME:

Drilling	13.25	Weld Bowl		Cement		Safety/BOP	0.25
Rig Service	0.75	Fishing		WOC		Clean bear trap	0.25
Tripping	7.25	Logging		Nipple up		Slip & Cut	
Survey	1.00	Coring		Leak off test		Connection time	0.50
Circ./Cond.	0.50	Handle tools		DST		W/O gas detector	0.25
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:15	Lay down 4 joints of drill pipe.
00:15	00:30	Rig service, function test annular.
00:30	01:00	Wash down from 2347 - 2367 m.
01:00	07:00	Drill 152.4 mm hole from 2367 - 2396 m.
07:00	08:00	Wireline survey and connection time.
08:00	08:15	Rig service, function test pipe rams.
08:15	15:00	Drill 152.4 mm hole from 2396 - 2408 m.
15:00	15:30	Accumulate connection time.
15:30	15:45	Replace MD Totco gas detector.
15:45	16:00	Clean out bear trap on mud pump.
16:00	16:15	Rig service, function test annular.
16:15	16:45	Drill 152.4 mm hole from 2408 - 2409 m.
16:45	17:15	Circulate bottoms up.
17:15	21:45	Trip out of hole.
21:45	22:15	Lay down mud motor, function test blind rams.
22:15	22:30	Safety meeting with crew on weekend awareness.
22:30	00:00	Make up new bit, trip in hole.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 165 Jts of 177.8 mm, 38.69 kg/m, J55 LT&C casing.
Landed at 2199 mKB. Total length 2199.71 meters. Stage tool 1496.52 mKB
Cemented with 22.7 tonne (29.2m3 RFC lite) + 2.2% B810 + 1.5% DO79 Stage 2 from 1496.52m - 0m.
Plug down at 11:14 hrs. On Nov.25/09 with 6 m3 cement returns.

HSE: Exposure: 46 Man Hours: 216 Cumulative per Well: 10505 Supply Trips to Rig: 77 72100 Km Driven: Incidents: 0
POB: Savanna: 11 Service Comp.: 3 Pétrolia/Codeco: 4 Cumulative: 18
Drilling Water (m3): 70 Available at Rig Site: 70 Daily Consumption: 3 Daily Delivery: 0 Total Consumption: 501
Potable Water (m3): 8 Available at Rig Site: 8 Daily Consumption: 2 Daily Delivery: 0 Total Consumption: 73
Fuel: 150051 Available at Rig Site: 8977 Daily Consumption: 3458 Daily delivery : 0 Total Consumption: 141074

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

PETROLIA
1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

CODECO CONSULTING 2000 INC.
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 02-Dec-09 **Day:** 41
Measured Depth (mMD/KB): 2434 m **Vertical Depth (mTVD/KB):** m **Progress:** 25 m
Drilling Hours: 5.50 Drill Rate: 4.50 m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Running DST #4. **Weather:** Cloudy, -3 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
17	152.4	MA32YPX	JT5758	2409	2434	25	5.50	10000	70	3 x 12.7 3 x 9.5	2-3-FC-G-X-0-CT-RIG

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density	1650	1600
Liner/Stroke(mm)	127/254	140/254	Overflow Density	1045	1045
SPM	95		Flowrate (l/m)	800	800
Volume (m3/min)	0.91		Operating Hours	6	6

Pump Pressure: 9400 **Annular Velocity (m/min): 80** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1070	TOOL	OD	ID	LENGTH
2403.00	33.00		Viscosity	52	Bit	152		.25
			Plastic Viscosity	16	Mud motor	133	72	8.62
			Yield Point	10	Shock tool SN-DM475SS02	123	45	2.36
			Gel Strengths	2.0/3.0	X/O	131	67	1.11
			pH	10.5	HWDP	101	72	299.65
			Water Loss	9.0	X/O	130	60	.54
			Filter Cake	1	Jars SN-KJ75-001	123	56	4.92
			Chlorides	19000	X/O	128	61	.31
			Solids %	4.4	HWDP	101	72	74.88
			K + mg/l	20300	Drill pipe	101	65	2038.10
					Kelly			3.71
			KCL mg/l	39300				
			Daily Cost:	900				
			Cum. Cost:	109534			TOTAL	2434

RIG TIME:

Drilling	5.50	Weld Bowl		Cement		Safety/BOP	0.25
Rig Service	0.50	Fishing		WOC		Clean bear trap	
Tripping	14.25	Logging		Nipple up		Slip & Cut	
Survey	1.00	Coring		Leak off test		Connection time	
Circ./Cond.	1.00	Handle tools	1.50	DST		W/O gas detector	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:45	Trip in hole.
00:45	01:00	Rig service, function test annular.
01:00	01:30	Wash down from 2396 - 2409 m.
01:30	07:00	Drill 152.4 mm hole from 2409 - 2434 m.
07:00	08:00	Wireline survey and connection time. Missing shock absorber on survey tool.
08:00	09:00	Circulate bottoms up.
09:00	20:00	Trip out of hole slowly. Recover shock absorber inside the top of mud motor.
20:00	20:15	Rig service, function test blind rams.
20:15	20:30	Safety meeting.
20:30	22:00	Make up test tools for DST #4.
22:00	00:00	Trip in hole with DST tools.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 165 Jts of 177.8 mm, 38.69 kg/m, J55 LT&C casing.
Landed at 2199 mKB. Total length 2199.71 meters. Stage tool 1496.52 mKB
Cemented with 22.7 tonne (29.2m3 RFC lite) + 2.2% B810 + 1.5% DO79 Stage 2 from 1496.52m - 0m.
Plug down at 11:14 hrs. On Nov.25/09 with 6 m3 cement returns.

HSE:	Exposure:	47	Man Hours:	228	Cumulative per Well:	10733	Supply Trips to Rig: 79		78100 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	4	Cumulative:	19			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	3	Daily Delivery:	0	Total Consumption:		504
Potable Water (m3):		8	Available at Rig Site:	6	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:		75
Fuel:	150051		Available at Rig Site:	7015	Daily Consumption:	1962	Daily delivery :	0	Total Consumption:		143036

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence 2009FC135

PETROLIA
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Fax: (418) 657-1880

DAILY DRILLING REPORT

CODECO
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 03-Dec-09 **Day:** 42
Measured Depth (mMD/KB): 2434 m **Vertical Depth (mTVD/KB):** m **Progress:** m
Drilling Hours: Drill Rate: m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: DST #5 from 2312 - 2334 m. **Weather:** Cloudy, -2 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	127/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1070	TOOL	OD	ID	LENGTH
2403.00	33.00		Viscosity	52	Bit	152		.25
			Plastic Viscosity	16	Mud motor	133	72	8.62
			Yield Point	10	Shock tool SN-DM475SS02	123	45	2.36
			Gel Strengths	2.0/3.0	X/O	131	67	1.11
			pH	10.5	HWDP	101	72	299.65
			Water Loss	9.0	X/O	130	60	.54
			Filter Cake	1	Jars SN-KJ75-001	123	56	4.92
			Chlorides	19000	X/O	128	61	.31
			Solids %	4.4	HWDP	101	72	74.88
			K + mg/l	20300	Drill pipe	101	65	2038.10
					Kelly			3.71
			KCL mg/l	39300				
			Daily Cost:	900				
			Cum. Cost:	110434			TOTAL	2434

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	0.50
Rig Service	0.25	Fishing		WOC		Clean bear trap	
Tripping	7.75	Logging		Nipple up		Slip & Cut	
Survey		Coring		Leak off test		Connection time	
Circ./Cond.		Handle tools		DST	15.50	W/O gas detector	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:45	Trip in hole.
00:45	10:45	DST #4 (2405 - 2395 m).
10:45	15:45	Trip out of hole with DST tools.
15:45	16:00	BOP drill with crew, well secured in 97 seconds.
16:00	20:15	Recover recorders, service test tools.
20:15	20:30	Rig service, function test blind rams.
20:30	20:45	BOP drill, well secured in 96 seconds.
20:45	22:00	Make up test tools for DST #5.
22:00	00:00	Trip in hole.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 165 Jts of 177.8 mm, 38.69 kg/m, J55 LT&C casing.
Landed at 2199 mKB. Total length 2199.71 meters. Stage tool 1496.52 mKB
Cemented with 22.7 tonne (29.2m3 RFC lite) + 2.2% B810 + 1.5% DO79 Stage 2 from 1496.52m - 0m.
Plug down at 11:14 hrs. On Nov.25/09 with 6 m3 cement returns.

HSE:	Exposure:	48	Man Hours:	216	Cumulative per Well:	10949	Supply Trips to Rig: 79		78100 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	3	Cumulative:	18			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	3	Daily Delivery:	0	Total Consumption:		507
Potable Water (m3):		8	Available at Rig Site:	4	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:		77
Fuel:	165403		Available at Rig Site:	17930	Daily Consumption:	4437	Daily delivery :	15352	Total Consumption:		147473

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

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DAILY DRILLING REPORT

CODECO
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 04-Dec-09 **Day:** 43
Measured Depth (mMD/KB): 2434 m **Vertical Depth (mTVD/KB):** m **Progress:** m
Drilling Hours: Drill Rate: m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Log wth Schlumberger **Weather:** Cloudy, -6 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	127/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, MF Vis-2.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1065	TOOL	OD	ID	LENGTH
			Viscosity	48				
			Plastic Viscosity	16				
			Yield Point	11				
			Gel Strengths	3.0/4.0				
			pH	10.5				
			Water Loss	8.5				
			Filter Cake	1				
			Chlorides	19000				
			Solids %	4.6				
			K + mg/l	20300				
			KCL mg/l	39300				
			Daily Cost:	1532				
			Cum. Cost:	111966				

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	
Rig Service		Fishing		WOC		Clean bear trap	
Tripping	9.25	Logging		Nipple up		Slip & Cut	
Survey		Coring		Leak off test		Connection time	
Circ./Cund.	2.00	Handle tools		DST	12.75	W/O gas detector	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	00:45	Trip in hole with test tools.
00:45	11:00	Head up and perform DST # 5.
11:00	15:45	Trip out of hole with DST tools.
15:45	18:15	Recover recorders, lay down test tools.
18:15	22:00	Make up bit, trip in hole for clean out.
22:00	00:00	Circulate hole clean.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size: 244.5m x 279mm** **Rating: 21000 kPa**

CASING SUMMARY

Ran 165 Jts of 177.8 mm, 38.69 kg/m, J55 LT&C casing
Landed at 2199 mKB. Total length 2199.71 meters. Stage tool 1496.52 mKB
Cemented with 22.7 tonne (29.2m3 RFC lite) + 2.2% B810 + 1.5% DO79 Stage 2 from 1496.52m - 0m.
Plug down at 11:14 hrs. On Nov.25/09 with 6 m3 cement returns.

HSE:	Exposure:	49	Man Hours:	216	Cumulative per Well:	11165	Supply Trips to Rig: 79		78100 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	4	Pétrolia/Codeco:	3	Cumulative:	18			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	3	Daily Delivery:	0	Total Consumption:		510
Potable Water (m3):		8	Available at Rig Site:	6	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:		79
Fuel:		165403	Available at Rig Site:	17930	Daily Consumption:	2651	Daily delivery :	0	Total Consumption:		150124

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

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1305, boulevard Lebourgneuf
Bureau 302
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Fax: (418) 657-1880

DAILY DRILLING REPORT

CODECO
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 05-Dec-09 **Day:** 44
Measured Depth (mMD/KB): 2434 m **Vertical Depth (mTVD/KB):** m **Progress:** m
Drilling Hours: Drill Rate: m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Log with Schlumberger. **Weather:** Cloudy, -2 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	127/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight	1065	TOOL	OD	ID	LENGTH
			Viscosity	48				
			Plastic Viscosity	16				
			Yield Point	11				
			Gel Strengths	3.0/4.0				
			pH	10.5				
			Water Loss	8.5				
			Filter Cake	1				
			Chlorides	19000				
			Solids %	4.6				
			K + mg/l	20300				
			KCL mg/l	39300				
			Daily Cost:	1532				
			Cum. Cost:	111966				

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	0.25
Rig Service	0.25	Fishing		WOC		Clean bear trap	
Tripping	3.75	Logging	19.00	Nipple up		Slip & Cut	0.75
Survey		Coring		Leak off test		Connection time	
Circ./Cond.		Handle tools		DST		W/O gas detector	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	03:45	Trip out of hole.
03:45	04:00	Rig service, function test blind rams.
04:00	04:15	Safety meeting.
04:15	05:00	Slip and cut drill line.
05:00	00:00	Rig up loggers and log with Schlumberger. Log #1: PEX-HRLA-HGNS. Start in hole at 0830 hours. Logs on bottom at 1000 hours.
		Logs at surface at 1330 hours. Loggers depth 2436.1 m.
		Log #2: FMI-DSI-SGT-C. Start in hole at 1430 hours. On bottom at 1800 hours. At surface 2000 hours.
		Log #3 MSCT coring tool. Start in hole at 2100 hours. On bottom at 2315 hours.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 165 Jts of 177.8 mm, 38.69 kg/m, J55 LT&C casing.
Landed at 2199 mKB. Total length 2199.71 meters. Stage tool 1496.52 mKB
Cemented with 22.7 tonne (29.2m3 RFC lite) + 2.2% B810 + 1.5% DO79 Stage 2 from 1496.52m - 0m.
Plug down at 11:14 hrs. On Nov.25/09 with 6 m3 cement returns.

HSE:	Exposure:	50	Man Hours:	276	Cumulative per Well:	11441	Supply Trips to Rig: 81		80500 Km Driven:		Incidents: 0
POB:	Savanna:	11	Service Comp.:	8	Pétrolia/Codeco:	4	Cumulative:	23			
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	3	Daily Delivery:	0	Total Consumption:		510
Potable Water (m3):		8	Available at Rig Site:	4	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:		81
Fuel:	165403		Available at Rig Site:	12907	Daily Consumption:	2372	Daily delivery :	0	Total Consumption:		152496

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence 2009FC135

1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 06-Dec-09 **Day:** 45
Measured Depth (mMD/KB): 2434 m **Vertical Depth (mTVD/KB):** m **Progress:** m
Drilling Hours: Drill Rate: m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Lay down 101.6 mm drill pipe. **Weather:** Cloudy -12 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	127/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1, Corinox-15.

SURVEYS			MUD		DRILLING ASSEMBLY			
Depth (mMD)	Inclination (deg)	Direction (deg)	Mud Weight		TOOL	OD	ID	LENGTH
			Viscosity					
			Plastic Viscosity					
			Yield Point					
			Gel Strengths					
			pH					
			Water Loss					
			Filter Cake					
			Chlorides					
			Solids %					
			K + mg/l					
			KCL mg/l					
			Daily Cost:	2400				
			Cum. Cost:	114366				

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	
Rig Service		Fishing		WOC		Clean bear trap	
Tripping	11.75	Logging	10.50	Nipple up		Slip & Cut	
Survey		Coring		Leak off test		Connection time	
Circ./Cond.	0.75	Handle tools	1.00	DST		W/O gas detector	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	10:30	Log #3 at surface at 0300 hours.
		Log #4 Sonic-Gamma Ray. Start in hole at 0400 hours, on bottom at 0530 hours, at surface at 1000 hours. Rigged out at 1030 hours.
10:30	16:00	Trip in hole with 101.6 mm drill pipe to 2434 m.
16:00	16:45	Displace hole and casing to inhibited water.
16:45	20:45	Trip out of hole.
20:45	00:00	Make up 177.8 mm retrievable packer with on/off tool, trip in hole.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 165 Jts of 177.8 mm, 38.69 kg/m, J55 LT&C casing.
Landed at 2199 mKB. Total length 2199.71 meters. Stage tool 1496.52 mKB
Cemented with 22.7 tonne (29.2m3 RFC lite) + 2.2% B810 + 1.5% DO79 Stage 2 from 1496.52m - 0m.
Plug down at 11:14 hrs. On Nov.25/09 with 6 m3 cement returns.

HSE:	Exposure:	51	Man Hours:	276	Cumulative per Well:	11717	Supply Trips to Rig:	82	81700	Km Driven:	Incidents:	0	
POB:	Savanna:	11	Service Comp.:	8	Pétrolia/Codeco:	4	Cumulative:	23					
Drilling Water (m3):		70	Available at Rig Site:	70	Daily Consumption:	3	Daily Delivery:	0	Total Consumption:			513	
Potable Water (m3):		8	Available at Rig Site:	8	Daily Consumption:	2	Daily Delivery:	8	Total Consumption:			83	
Fuel:	165403		Available at Rig Site:	10119	Daily Consumption:	2788	Daily delivery :	0	Total Consumption:			155284	

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: Well Licence: 2009FC135

PETROLIA
1305, boulevard Lebourgneuf
Bureau 302
Québec (Québec) G2K 2E4
Ph: (418) 657-1966
Fax: (418) 657-1880

DAILY DRILLING REPORT

CODECO CONSULTING 2000 INC.
3rd Floor, 3333 - 8th Street SE
Calgary, Alberta T2G 3A4
Ph: (403) 237-7808
Fax: (403) 265-1760

Well Name: Pétrolia, Tarpoint N°1 **Date:** 07-Dec-09 **Day:** 46
Measured Depth (mMD/KB): 2434 m **Vertical Depth (mTVD/KB):** m **Progress:** m
Drilling Hours: Drill Rate: m/hr **Rig:** Savanna # 635 **Project TD:** 1500
0800 hrs Operation: Tear out rig. **Weather:** Cloudy, -3 C

Bit No.	Size	Type	S/N	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition

	Pump No. 1	Pump No. 2		Centrifuge 1	Centrifuge 2
Model	F 1000	F1000	Underflow Density		
Liner/Stroke(mm)	127/254	140/254	Overflow Density		
SPM			Flowrate (l/m)		
Volume (m3/min)			Operating Hours		

Pump Pressure: **Annular Velocity (m/min):** **Jet Velocity (m/s):**

MUD ADDITIVES: Mud Man-1

SURVEYS

Depth (mMD)	Inclination (deg)	Direction (deg)

MUD

Mud Weight	
Viscosity	
Plastic Viscosity	
Yield Point	
Gel Strengths	
pH	
Water Loss	
Filter Cake	
Chlorides	
Solids %	
K + mg/l	
KCL mg/l	
Daily Cost:	900
Cum. Cost:	115266

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH

RIG TIME:

Drilling		Weld Bowl		Cement		Safety/BOP	
Rig Service	0.50	Fishing		WOC		Rig out	9.25
Tripping	6.75	Logging		Nipple down	5.75	Slip & Cut	
Survey		Coring		Pressure test	0.50	Connection time	
Circ./Cond.		Set packer	1.25	DST		W/O gas detector	
Pick up BHA		Run Casing		Rig repair		Move rig	

24 HOUR OPERATIONS

00:00	02:15	Trip in hole with packer.
02:15	03:30	Set packer. Center element set at 2182 m. Top of on/off tool at 2180 m.
03:30	04:00	Pressure test packer to 7000 kPa for 10 minutes.
04:00	04:45	Rig service, blow kelly.
04:45	05:45	Ready lease to lay down tubulars.
05:45	10:15	Lay down 101.4 mm drill pipe.
10:15	16:00	Nipple down BOP's. Weld cap on top of 177.8 mm casing. Clean mud tanks.
16:00	00:00	Tear out rig. Ready site to rack rig.
		190 m3 of KCL fluid stored in Foraction storage tanks.
		Wait on trucks to rack rig.
		Final report.
		Rig released December 7, 2009 at 1600 hours.

Coordinates: UTM 20 (CM 63°), NAD 83: X 403 810.062 Y 5 397 657.189 Lattitude: 48° 43'28.24920" Longitude: 64° 18'28.50978"

CASING BOWL: **Make/Model/SN#:** Cameron/IC-9/SN 110728311-1 **Size:** 244.5m x 279mm **Rating:** 21000 kPa

CASING SUMMARY

Ran 165 Jts of 177.8 mm, 38.69 kg/m, J55 LT&C casing.
Landed at 2199 mKB. Total length 2199.71 meters. Stage tool 1496.52 mKB
Cemented with 22.7 tonne (29.2m3 RFC lite) + 2.2% B810 + 1.5% DO79 Stage 2 from 1496.52m - 0m.
Plug down at 11:14 hrs. On Nov.25/09 with 6 m3 cement returns.

HSE:	Exposure:	52	Man Hours:	192	Cumulative per Well:	11909	Supply Trips to Rig:	84	87900	Km Driven:	Incidents: 0
POB:	Savanna:	11	Service Comp.:	2	Pétrolia/Codeco:	3	Cumulative:	16			
Drilling Water (m3):		0	Available at Rig Site:	20	Daily Consumption:	3	Daily Delivery:	0	Total Consumption:		516
Potable Water (m3):		8	Available at Rig Site:	6	Daily Consumption:	2	Daily Delivery:	0	Total Consumption:		85
Fuel:		165403	Available at Rig Site:	7766	Daily Consumption:	2353	Daily delivery :	0	Total Consumption:		157637

Drilling Forman: Marcel Yurchak Phone #: 403-852-8040 KB Elev: 38.36 CF Elev: 33.56 GL Elev: 33.34
Office Supervisor: Mike Smith Phone #: 403-237-7808

Spud Date: October 23, 2009 at 12:15 hours Rig Released: December 7/2009 @ 16:00 hrs Well Licence #: 2009FC135

ANNEXE 3

RAPPORTS JOURNALIERS DE LA BOUE

Water Based Report

Printed: 10/29/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 10/23/2009 | Report: 1 of 9

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 0

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: Clay Free

Bit #	1	Drill String				Casing				Mud Volumes	
Size (mm)	311.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	EG1HGLC	DC	203.2	73.0	20.0					Annulus (m³)	2.1
Depth In (m)	0	DC	165.0	59.0	23.0					String Cap (m³)	0.1
Jets (mm)	15.9 15.9 15.9	HWDP	102.0	68.0						Hole (m³)	2.3
		DP	102.0	73.0	0.0					Tanks (m³)	50.0
Hours										Ttl Active (m³)	52.3
ROP (m/hr)		Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	66.2		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.37
Bit HHP (KW)	96.7	Pump 1	140.0	254.0	0.0112	106	1.18				
Jet Impact (N)	2,625.1	Pump 2	140.0	254.0	0.0112	106	1.18	Circ. Pres. (Kpa)			3,400

Properties	16:38 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	43	D.P. + Open	30.0	Surf. to Bit	0.1	Dev.	Depth	Az.	Surf.	2.3
T.V. Depth (m)	43.00	D.P. + Casing		Hole Circ.	1.0				Hole	
Density (kg/m³)	1,020	D.C. #1	36.1	Bottoms Up	0.9				Dumped	
Mud Grad. (kPa/m)	10.01	D.C. #2	36.1	Total Active	22.1				Dilution (L/min)	10.0
Temp (°C)	18	Solids Calculations				Solids Equipment				
Vis (sec/L)	33	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	2/1	L. Grav.	kg/m³		%	Shaker	derreck	80	80	100
200/100	1/0	Drill Sol.	kg/m³		%	Shaker	derrick	80	80	100
6/3	0/0	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)		L/min
P.V. (mPa-sec)	1.0	Oil / Water	/			Centrif				
Y.P. (Pa)	0.0	E.C.D.	1,020 kg/m³			Centrif				
Gels (10sec/10min)	0.0/0.0	Materials req. for 10 kg/m³ increase				Barite (sacks)	17.2	Cal.Carb. (sacks)		33.8
pH	10.5	Low n (slope)				High n (slope)	1.00			
Filtrate (cc/30)		Low K (dyn-sec/cm²)				High K (dyn-sec/cm²)	0.00			
Cake (mm)		Recommendations & Remarks								
Sand (V/frac)	0.000	Maintain ph around 10-10.5 with caustic, add gel as hole dictate from premix.								
Solids (V/frac)										
M.B.T. (kg/m³)										
Alkalinity (pF/mF)										
Chlorides (mg/L)	500									
Calcium (mg/L)	40									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	0.00									
Hydroxyl (mg/L)	0.00									
Bicarbonate (mg/L)	0.00									

Product	Units	Qty.
Engineering	1.0 EA	4

Well History

Spuded with water @ 12:15 pm, drilled ahead to 50m to slowly raise viscosity to 40-45 s/l by addition of high vis premix. No problems were reported.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$0.00
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$3,600.00
Location	Motel Plante				Cumulative	$3,600.00

The recommendation hereon shall not be construed as authorizing the infringement of any valid patent and are made without assumption of any liability by its agents and are statements of opinions only. Prior to handling or mixing the products recommended in this report, the MSDS for those products must be consulted. In consideration of this report and oral suggestions, it is agreed that Alliance Drilling Fluids Ltd. shall not be liable for any damage resulting from the same and it is to be held harmless.

Water Based Report

Alliance Drilling Fluids Ltd.

Printed: 10/29/2009
Version: ADF - 3.0

Report Date: 10/24/2009 | Report: 3 of 9

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 1

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: Gel Chemical

Bit #	1	Drill String				Casing				Mud Volumes	
Size (mm)	311.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	EG1HGLC	DC	203.2	73.0	20.0					Annulus (m³)	7.1
Depth In (m)	0	DC	165.0	59.0	115.0					String Cap (m³)	0.4
Jets (mm)	15.9 15.9 15.9	HWDP	102.0	68.0						Hole (m³)	7.5
		DP	102.0	73.0	0.0					Tanks (m³)	43.7
Hours	14.0									Ttl Active (m³)	51.2
ROP (m/hr)	15.1	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	63.7		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)		2.28	
Bit HHP (KW)	88.7	Pump 1	140.0	254.0	0.0112	101	1.13				
Jet Impact (N)	2,502.2	Pump 2	140.0	254.0	0.0112	103	1.15	Circ. Pres. (Kpa)		5,100	

Properties	19:05 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	135	D.P. + Open	30.1	Surf. to Bit	0.2	Dev.	Depth	Az.	Surf.	0.7
T.V. Depth (m)	135.00	D.P. + Casing		Hole Circ.	3.3				Hole	
Density (kg/m³)	1,050	D.C. #1	36.5	Bottoms Up	3.1				Dumped	
Mud Grad. (kPa/m)	10.30	D.C. #2	36.5	Total Active	22.5				Dilution (L/min)	0.0
Temp (°C)	31	Solids Calculations				Solids Equipment				
Vis (sec/L)	42	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	29/19	L. Grav.	85.8 kg/m³		3.2 %	Shaker	derreck	80	80	100
200/100	17/13	Drill Sol.	43.0 kg/m³		1.6 %	Shaker	derrick	80	80	100
6/3	10/9	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	10.0	Oil / Water	0.0 /		96.7	Centrif	1,040	1,050		
Y.P. (Pa)	4.5	E.C.D.	1,053 kg/m³			Centrif	1,040	1,050		
Gels (10sec/10min)	5.0/8.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	17.1	Cal.Carb. (sacks)			33.7
pH	9.5	Low n (slope)	0.16		High n (slope)	0.61				
Filtrate (cc/30)	15.0	Low K (dyn-sec/cm²)	4.85		High K (dyn-sec/cm²)	0.22				
Cake (mm)	2.0									
Sand (V/frac)	0.008									
Solids (V/frac)	0.033									
M.B.T. (kg/m³)	48.5									
Alkalinity (pF/mF)	0.15/0.40									
Chlorides (mg/L)	2,800									
Calcium (mg/L)	80									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	180.00									
Hydroxyl (mg/L)	0.00									
Bicarbonate (mg/L)	122.00									

Product	Units	Qty.
Bentonite	40.0 KG	14

Recommendations & Remarks

Maintain ph @10-10.5 with caustic.
Maintain viscosity 45-50 with gel.
Keep density as per marcel s' request.

Prior to TD raise viscosity to 65-70 S/L to ensure adequate cleaning.
Prior to cementing lower viscosity back to 40 S/L with desco and water.

Well History

Drilled from 42m to 135m, at 69m, influx of water from formation entred well bore at a rate of 3-4/m3 per hour. Centrifuges were stoped immediatly and a premix of higher vis was blend in to stop influx. Clorides climbed from 500mg/l to 2800mg/l due to influx of water.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$6,406.68
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$264.74
Location	Motel Plante				Cumulative	$6,671.42

The recommendation hereon shall not be construed as authorizing the infringement of any valid patent and are made without assumption of any liability by its agents and are statements of opinions only. Prior to handling or mixing the products recommended in this report, the MSDS for those products must be consulted. In consideration of this report and oral suggestions, it is agreed that Alliance Drilling Fluids Ltd. shall not be liable for any damage resulting from the same and it is to be held harmless.

Water Based Report

Alliance Drilling Fluids Ltd.

Printed: 10/29/2009
Version: ADF - 3.0

Report Date: 10/25/2009 | Report: 4 of 9
Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54
Operator: Petrolia | Well Name: Petrolia | Prov: AB
Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 2
Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: Gel Chemical

Bit #	1	Drill String				Casing			Mud Volumes	
Size (mm)	311.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	EG1HGLC	DC	203.2	73.0	20.0					Annulus (m³)	10.3
Depth In (m)	0	DC	165.0	59.0	172.0					String Cap (m³)	0.6
Jets (mm)	15.9 15.9 15.9	HWDP	102.0	68.0						Hole (m³)	10.8
		DP	102.0	73.0	0.0					Tanks (m³)	37.0
Hours	14.0									Ttl Active (m³)	47.8
ROP (m/hr)	15.1	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	63.7		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.28
Bit HHP (KW)	95.5	Pump 1	140.0	254.0	0.0112	101	1.13				
Jet Impact (N)	2,692.8	Pump 2	140.0	254.0	0.0112	103	1.15	Circ. Pres. (Kpa)			9,500

Properties	08:03 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	192	D.P. + Open	33.6	Surf. to Bit	0.2	Dev.	Depth	Az.	Surf.	3.8
T.V. Depth (m)	192.00	D.P. + Casing		Hole Circ.	4.7				Hole	
Density (kg/m³)	1,130	D.C. #1	41.7	Bottoms Up	4.5				Dumped	
Mud Grad. (kPa/m)	11.09	D.C. #2	41.7	Total Active	21.0				Dilution (L/min)	
Temp (°C)	38	Solids Calculations				Solids Equipment				
Vis (sec/L)	55	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	32/28	L. Grav.	215.8 kg/m³		8.1 %	Shaker	derreck	80	80	100
200/100	27/22	Drill Sol.	184.3 kg/m³		7.0 %	Shaker	derrick	80	80	100
6/3	16/15	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)		L/min
P.V. (mPa-sec)	4.0	Oil / Water	0.0 /		91.7	Centrif				
Y.P. (Pa)	12.0	E.C.D.	1,134 kg/m³			Centrif				
Gels (10sec/10min)	12.0/16.0	Materials req. for 10 kg/m³ increase		Barite (sacks)	16.3	Cal.Carb. (sacks)				33.1
pH	8.5	Low n (slope)	0.14	High n (slope)	0.19					
Filtrate (cc/30)	16.0	Low K (dyn-sec/cm²)	7.15	High K (dyn-sec/cm²)	4.77					
Cake (mm)	2.0	Recommendations & Remarks								
Sand (V/frac)	0.011	Maintain ph @10-10.5 with caustic.								
Solids (V/frac)	0.083	Maintain viscosity 45-50 with gel.								
M.B.T. (kg/m³)	55.6	Keep density as per marcel s' request.								
Alkalinity (pF/mF)	0.05/0.60	Prior to TD raise viscosity to 65-70 S/L to ensure adequate cleaning.								
Chlorides (mg/L)	2,800	Prior to cementing lower viscosity back to 40 S/L with desco and water.								
Calcium (mg/L)	40									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	60.00									
Hydroxyl (mg/L)	0.00									
Bicarbonate (mg/L)	610.00									

Product	Units	Qty.
Bentonite	40.0 KG	15
Caustic Soda	22.7 KG	1
Lignite	50.0 LB	1
Engineering	1.0 EA	1

Well History

Drilled from 135m to 192m, viscosity was maintain around 45-50 all night, no problems were reported.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$6,671.42
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$1,262.27
Location	Motel Plante				Cumulative	$7,933.69

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Alliance Drilling Fluids Ltd.

Water Based Report

Printed: 10/25/2009
Version: ADF - 3.0

Report Date: 10/25/2009 | Report: 5 of 5

Spud: 10/23/2009 | Activity: Circulate and Condition | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 2

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: Gel Chemical

Bit #	1	Drill String	OD (mm)	ID (mm)	Length (m)	Casing	OD (mm)	ID (mm)	Set At (m)	Mud Volumes	
Size (mm)	311.0									Storage (m³)	
Type	EG1HGLC	DC	203.2	73.0						Annulus (m³)	11.9
Depth In (m)	0	DC	165.0	59.0	193.0					String Cap (m³)	0.6
Jets (mm)	15.9 15.9 15.9	HWDP	102.0	68.0						Hole (m³)	12.5
		DP	102.0	73.0	20.0					Tanks (m³)	35.8
Hours	14.0									Ttl Active (m³)	48.3
ROP (m/hr)	15.2	Pump Data	F1000					F1000			
Noz. Vel. (m/sec)	0.0		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			0.00
Bit HHP (KW)	0.0	Pump 1	140.0	254.0	0.0112						
Jet Impact (N)	0.0	Pump 2	140.0	254.0	0.0112			Circ. Pres. (Kpa)			0

Properties	22:30 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys	Dev.	Depth	Az.	Losses (m³)	
Depth (m)	213	D.P. + Open	0.0	Surf. to Bit						Surf.	
T.V. Depth (m)	213.00	D.P. + Casing		Hole Circ.						Hole	
Density (kg/m³)	1,075	D.C. #1	0.0	Bottoms Up						Dumped	
Mud Grad. (kPa/m)	10.55	D.C. #2	0.0	Total Active						Dilution (L/min)	
Temp (°C)	23	Solids Calculations				Solids Equipment					
Vis (sec/L)	42	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens			
600/300	26/16	L. Grav.	124.8 kg/m³		4.7 %	Shaker	derreck	70	70	70	
200/100	13/8	Drill Sol.	88.6 kg/m³		3.3 %	Shaker	derrick	70	70	70	
6/3	3/2	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)		L/min	
P.V. (mPa-sec)	10.0	Oil / Water	0.0 /		95.2	Centrif					
Y.P. (Pa)	3.0	E.C.D.	1,075 kg/m³			Centrif					
Gels (10sec/10min)	2.0/3.0	Materials req. for 10 kg/m³ increase		Barite (sacks)	16.2	Cal.Carb. (sacks)		32.3			
pH	8.5	Low n (slope)	0.45	High n (slope)	0.70						
Filtrate (cc/30)	20.0	Low K (dyn-sec/cm²)	0.51	High K (dyn-sec/cm²)	0.10						
Cake (mm)	1.5										
Sand (V/frac)	0.005										
Solids (V/frac)	0.048										
M.B.T. (kg/m³)	47.7										
Alkalinity (pF/mF)	0.05/0.60										
Chlorides (mg/L)	2,800										
Calcium (mg/L)	40										
pHpA (Kg/m3)	0.0										
Carbonate (mg/L)	60.00										
Hydroxyl (mg/L)	0.00										
Bicarbonate (mg/L)	610.00										

Product	Units	Qty.

Recommendations & Remarks

Mud looks good for cementing.

Well History

Drilled from 192m to TD @ 213m, viscosity was at 60 S/L prior to run CSG, no problems were reported. currently riging up to cement.

Water Based Report

Printed: 10/29/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 10/27/2009 | Report: 7 of 9
Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54
Operator: Petrolia | Well Name: Petrolia | Prov: AB
Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 4
Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #				Drill String				Casing			Mud Volumes	
Size (mm)			215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type				DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	9.6
Depth In (m)			212	HWDP	102.0	68.0	37.0					String Cap (m³)	1.4
Jets (mm)	9.5	9.5	9.5	DP	102.0	73.0	207.0					Hole (m³)	11.0
	9.5	9.5	9.5									Tanks (m³)	30.6
Hours			12.0									Ttl Active (m³)	41.6
ROP (m/hr)			14.7	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)			67.9		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.02
Bit HHP (KW)			94.0	Pump 1	140.0	254.0	0.0112	87	0.97				
Jet Impact (N)			2,488.6	Pump 2	140.0	254.0	0.0112	94	1.05	Circ. Pres. (Kpa)			8,500

Properties	15:24 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	388	D.P. + Open	71.8	Surf. to Bit	0.7	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	388.00	D.P. + Casing	64.4	Hole Circ.	5.5				Hole	
Density (kg/m³)	1,105	D.C. #1	140.3	Bottoms Up	4.8				Dumped	22.1
Mud Grad. (kPa/m)	10.84	D.C. #2		Total Active	20.6				Dilution (L/min)	
Temp (°C)	15	Solids Calculations				Solids Equipment				
Vis (sec/L)	43	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	32/23	L. Grav.	2,425.8 kg/m³		91.5 %	Shaker	derreck	80	80	100
200/100	18/13	Drill Sol.	2,789.7 kg/m³		105.3 %	Shaker	derrick	80	80	100
6/3	5/4	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	9.0	Oil / Water	0.0 /		6.7	Centrif	1,105	1,085		
Y.P. (Pa)	7.0	E.C.D.	1,113 kg/m³			Centrif	1,105	1,085		
Gels (10sec/10min)	2.5/5.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	14.1	Cal.Carb. (sacks)			28.4
pH	10.5	Low n (slope)	0.38		High n (slope)	0.48				
Filtrate (cc/30)	18.0	Low K (dyn-sec/cm²)	1.18		High K (dyn-sec/cm²)	0.62				
Cake (mm)	1.5	Recommendations & Remarks								
Sand (V/frac)	0.005	- Maintain PH at 10- 10.5 with additions of Caustic Soda.								
Solids (V/frac)	0.933	-Maintain viscosity @ 45 S/L with additions of MF Vis.								
M.B.T. (kg/m³)	0.0									
Alkalinity (pF/mF)	0.90/1.20	- Lower Water Loss to 6-8 cc/30 min with MF Pac, lignite, and soltex at a ratio of 2/1/1.								
Chlorides (mg/L)	16,000									
Calcium (mg/L)	80	- add 1 pail of corinox daily.								
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	360.00									
Hydroxyl (mg/L)	204.00									
Bicarbonate (mg/L)	0.00									
K+ (mg/L)	18,500.000									

Product	Units	Qty.
Engineering	1.0 EA	1

Well History

Drilled out with water from 212m, water was displaced to kcl mud at 350m. No problems were reported.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$11,940.62
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$900.00
Location	Motel Plante				Cumulative	$12,840.62

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Water Based Report

Printed: 10/29/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 10/28/2009 | Report: 8 of 9
Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54
Operator: Petrolia | Well Name: Petrolia | Prov: AB
Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 5
Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #				Drill String				Casing				Mud Volumes	
Size (mm)			215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type				DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	11.4
Depth In (m)			212	HWDP	102.0	68.0	37.0					String Cap (m³)	1.7
Jets (mm)	9.5	9.5	9.5	DP	102.0	73.0	270.0					Hole (m³)	13.1
	9.5	9.5	9.5									Tanks (m³)	27.7
Hours			12.0									Ttl Active (m³)	40.8
ROP (m/hr)			19.9	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)			71.2		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.12
Bit HHP (KW)			107.7	Pump 1	140.0	254.0	0.0112	94	1.05				
Jet Impact (N)			2,717.4	Pump 2	140.0	254.0	0.0112	96	1.07	Circ. Pres. (Kpa)			11,100

Properties	09:06 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	451	D.P. + Open	75.4	Surf. to Bit	0.8	Dev.	Depth	Az.	Surf.	3.0
T.V. Depth (m)		D.P. + Casing	67.6	Hole Circ.	6.2				Hole	
Density (kg/m³)	1,095	D.C. #1	147.2	Bottoms Up	5.4				Dumped	
Mud Grad. (kPa/m)	10.74	D.C. #2		Total Active	19.2				Dilution (L/min)	
Temp (°C)	23	Solids Calculations				Solids Equipment				
Vis (sec/L)	41	H. Grav.	0.0 kg/m³		0.0 %		Type		Screens	
600/300	29/21	L. Grav.	kg/m³		%	Shaker	derreck		80 80	100
200/100	18/13	Drill Sol.	kg/m³		%	Shaker	derrick		80 80	100
6/3	3/2	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)		O.F.. (kg/m³)	L/min
P.V. (mPa-sec)	8.0	Oil / Water	/			Centrif	1,105		1,085	
Y.P. (Pa)	6.5	E.C.D.	1,101 kg/m³			Centrif	1,105		1,085	
Gels (10sec/10min)	2.0/4.0	Materials req. for 10 kg/m³ increase				Barite (sacks)	13.8	Cal.Carb. (sacks)		27.6
pH	10.5	Low n (slope)	0.51			High n (slope)	0.47			
Filtrate (cc/30)	18.0	Low K (dyn-sec/cm²)	0.45			High K (dyn-sec/cm²)	0.60			
Cake (mm)	1.5									
Sand (V/frac)	0.007									
Solids (V/frac)										
M.B.T. (kg/m³)										
Alkalinity (pF/mF)	0.60/0.60									
Chlorides (mg/L)	16,500									
Calcium (mg/L)	40									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	0.00									
Hydroxyl (mg/L)	204.00									
Bicarbonate (mg/L)	0.00									
K+ (mg/L)	18,100.000									

Recommendations & Remarks

- Maintain PH at 10- 10.5 with additions of Caustic Soda.

-Maintain viscosity @ 45 S/L with additions of MF Vis.

- Lower Water Loss to 6-8 cc/30 min with MF Pac, lignite, and soltex at a ratio of 2/1/1.

- add 1 pail of corinox daily.

Product	Units	Qty.
Defoamer	20.0 L	3
Envirofloc	80.0 LB	2
Soda Ash	25.0 KG	1
Corinox	20.0 L	1

Well History

Drilled from 350m to 450m, kop at 400m, trip out of of and rig up directionnal tools. Last survey at 432m was 5deg and 310.4 azm. No problems reported.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$12,840.62
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$601.42
Location	Motel Plante				Cumulative	$13,442.04

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Water Based Report

Alliance Drilling Fluids Ltd.

Printed: 10/29/2009
Version: ADF - 3.0

Report Date: 10/28/2009 | Report: 9 of 9

Spud: 10/23/2009 | Activity: Drill Directional | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 5

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #				Drill String				Casing				Mud Volumes	
Size (mm)			215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type				DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	15.1
Depth In (m)			212	HWDP	102.0	68.0	37.0					String Cap (m³)	2.2
Jets (mm)	9.5	9.5	9.5	DP	102.0	73.0	403.0					Hole (m³)	17.4
	9.5	9.5	9.5									Tanks (m³)	40.3
Hours			12.0									Ttl Active (m³)	57.7
ROP (m/hr)			31.0	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)			71.2		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.12
Bit HHP (KW)			108.2	Pump 1	140.0	254.0	0.0112	101	1.13				
Jet Impact (N)			2,729.9	Pump 2	140.0	254.0	0.0112	89	0.99	Circ. Pres. (Kpa)			12,600

Properties	18:59 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	584	D.P. + Open	75.4	Surf. to Bit	1.0	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)		D.P. + Casing	67.6	Hole Circ.	8.2				Hole	
Density (kg/m³)	1,100	D.C. #1	147.2	Bottoms Up	7.1				Dumped	
Mud Grad. (kPa/m)	10.79	D.C. #2		Total Active	27.2				Dilution (L/min)	
Temp (°C)	25	Solids Calculations				Solids Equipment				
Vis (sec/L)	43	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	41/31	L. Grav.	kg/m³		%	Shaker	derreck	80	80	100
200/100	26/207	Drill Sol.	kg/m³		%	Shaker	derrick	80	80	100
6/3	7/6	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	10.0	Oil / Water	/			Centrif	1,100	1,080		
Y.P. (Pa)	10.5	E.C.D.	1,108 kg/m³			Centrif	1,100	1,080		
Gels (10sec/10min)	4.0/6.0	Materials req. for 10 kg/m³ increase		Barite (sacks)	19.5	Cal.Carb. (sacks)				39.2
pH	10.5	Low n (slope)	0.36	High n (slope)	0.40					
Filtrate (cc/30)	8.0	Low K (dyn-sec/cm²)	1.76	High K (dyn-sec/cm²)	1.32					
Cake (mm)	1.5	Recommendations & Remarks								
Sand (V/frac)	0.010									
Solids (V/frac)		-Tonite mix 2sx of aquastar (Starch) over 2hrs, 3sxs of soltex over 2hr and 2sxs of lignite over 2hrs also to reduce fluid losses <5 or = to 5 for 30/min.								
M.B.T. (kg/m³)										
Alkalinity (pF/mF)	0.60/0.80	- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) and slowly add to active over 2 circulation.								
Chlorides (mg/L)	19,500									
Calcium (mg/L)	60	-Maintain viscosity @ 45 S/L with additions of MF Vis, mix in hopper slowly so you do not blind the shaker screens. (2 circulation recommended)								
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	240.00	- Add 1 pail of corinox daily on top of mud tanks, as slow as you can trough out the day.								
Hydroxyl (mg/L)	136.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	19,800.000									

Product	Units	Qty.
surefloc	22.7 KG	1
Defoamer	20.0 L	2
Caustic Soda	22.7 KG	2
Lignite	50.0 LB	2
Lime	20.0 KG	2
Soltex	50.0 LB	2
Zetag 7692	25.0 KG	4
Corinox	20.0 L	2
Engineering	1.0 EA	1

Well History

Drilled from 450m to 480m, kop at 400m, Last survey at 567m was 13.2deg and 323.8 azm. No problems reported.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$13,442.04
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$3,325.66
Location	Motel Plante				Cumulative	$16,767.70

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Water Based Report

Printed: 10/29/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 10/29/2009 | Report: 10 of 10

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 6

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #				Drill String				Casing				Mud Volumes	
Size (mm)			215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type			Q505	DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	17.0
Depth In (m)			640	HWDP	102.0	68.0	37.0					String Cap (m³)	2.5
Jets (mm)	9.5	9.5	9.5	DP	102.0	73.0	469.0					Hole (m³)	19.5
	9.5	9.5	9.5									Tanks (m³)	42.5
Hours												Ttl Active (m³)	62.0
ROP (m/hr)				Pump Data		F1000					F1000		
Noz. Vel. (m/sec)			71.2		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.12
Bit HHP (KW)			106.3	Pump 1	140.0	254.0	0.0112	101	1.13				
Jet Impact (N)			2,680.2	Pump 2	140.0	254.0	0.0112	89	0.99	Circ. Pres. (Kpa)			9,050

Properties	06:33 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	650	D.P. + Open	75.4	Surf. to Bit	1.2	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	644.00	D.P. + Casing	67.6	Hole Circ.	9.2				Hole	
Density (kg/m³)	1,080	D.C. #1	147.2	Bottoms Up	8.0				Dumped	
Mud Grad. (kPa/m)	10.59	D.C. #2		Total Active	29.2				Dilution (L/min)	
Temp (°C)	19	Solids Calculations				Solids Equipment				
Vis (sec/L)	43	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	35/26	L. Grav.	132.6 kg/m³		5.0 %	Shaker	derreck	80	80	100
200/100	22/17	Drill Sol.	152.5 kg/m³		5.8 %	Shaker	derrick	80	80	100
6/3	6/4	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	9.0	Oil / Water	0.0 /		94.9	Centrif	1,080	1,070		
Y.P. (Pa)	8.5	E.C.D.	1,086 kg/m³			Centrif	1,080	1,070		
Gels (10sec/10min)	3.0/5.0	Materials req. for 10 kg/m³ increase		Barite (sacks)	20.8	Cal.Carb. (sacks)		41.6		
pH	9.5	Low n (slope)	0.41	High n (slope)	0.43					
Filtrate (cc/30)	8.0	Low K (dyn-sec/cm²)	1.11	High K (dyn-sec/cm²)	0.95					
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.010	-Today mix 1sx of aquastar (Starch) over 1hr, 1sxs of soltex over 1hr and 1sxs of lignite over 1hr also, we need to reduce fluid losses <5 or = to 5 for 30/min.								
Solids (V/frac)	0.051									
M.B.T. (kg/m³)	0.0	- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.								
Alkalinity (pF/mF)	0.30/0.70									
Chlorides (mg/L)	15,000	-Maintain viscosity @ 45 S/L with additions of MF Vis, mix in hopper slowly so you do not blind the shaker screens. (2 circulation recommended per sx)								
Calcium (mg/L)	90									
pHpA (Kg/m3)	0.0	- Add 1 pail of corinox daily on top of mud tanks, as slow as you can through out the day.								
Carbonate (mg/L)	360.00									
Hydroxyl (mg/L)	0.00	-MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>								
Bicarbonate (mg/L)	122.00	-Circ time +-30min								
k+ (mg/L)	16,500.000	-Thanks Dominic								

Product	Units	Qty.
Engineering	1.0 EA	1

Well History

Drilled from 480m to 650m, P.O.O.H at 640m to change the bit, no problems tripping. Last survey at 625m was 20.3deg and 322 azm.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$16,767.70
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$900.00
Location	Motel Plante				Cumulative	$17,667.70

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Water Based Report

Printed: 10/30/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 10/29/2009 | Report: 11 of 11
Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54
Operator: Petrolia | Well Name: Petrolia | Prov: AB
Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 6
Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #				Drill String				Casing				Mud Volumes	
Size (mm)			215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type			Q505	DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	20.0
Depth In (m)			640	HWDP	102.0	68.0	37.0					String Cap (m³)	2.9
Jets (mm)	9.5	9.5	9.5	DP	102.0	73.0	574.0					Hole (m³)	22.9
	9.5	9.5	9.5									Tanks (m³)	30.5
Hours												Tl Active (m³)	53.4
ROP (m/hr)				Pump Data		F1000					F1000		
Noz. Vel. (m/sec)			71.2		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.12
Bit HHP (KW)			106.3	Pump 1	140.0	254.0	0.0112	101	1.13				
Jet Impact (N)			2,680.2	Pump 2	140.0	254.0	0.0112	89	0.99	Circ. Pres. (Kpa)			14,600

Properties	17:35 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	755	D.P. + Open	75.4	Surf. to Bit	1.4	Dev.	Depth	Az.	Surf.	8.8
T.V. Depth (m)	742.00	D.P. + Casing	67.6	Hole Circ.	10.8				Hole	
Density (kg/m³)	1,080	D.C. #1	147.2	Bottoms Up	9.4				Dumped	
Mud Grad. (kPa/m)	10.59	D.C. #2		Total Active	25.2				Dilution (L/min)	
Temp (°C)	29	Solids Calculations				Solids Equipment				
Vis (sec/L)	44	H. Grav.	0.0 kg/m³	0.0 %			Type	Screens		
600/300	38/28	L. Grav.	132.6 kg/m³	5.0 %		Shaker	derreck	80	80	100
200/100	24/18	Drill Sol.	152.5 kg/m³	5.8 %		Shaker	derrick	80	80	100
6/3	7/5	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	10.0	Oil / Water	0.0 /	94.9		Centrif	1,080	1,070		
Y.P. (Pa)	9.0	E.C.D.	1,087 kg/m³			Centrif	1,080	1,070		
Gels (10sec/10min)	3.0/4.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	17.9	Cal.Carb. (sacks)		35.8	
pH	10.0	Low n (slope)	0.37		High n (slope)	0.44				
Filtrate (cc/30)	10.0	Low K (dyn-sec/cm²)	1.43		High K (dyn-sec/cm²)	0.95				
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.011	-Tonight mix: 1sx of aquastar (Starch) over 1hr, 1sxs of soltex over 1hr and 1sxs of lignite over 1hr also, we need to maintain fluid loss 8-10 ml/30min.								
Solids (V/frac)	0.051									
M.B.T. (kg/m³)	0.0	- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessecary).								
Alkalinity (pF/mF)	0.40/0.60									
Chlorides (mg/L)	16,500	- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.								
Calcium (mg/L)	120									
pHpA (Kg/m3)	0.0	-Maintain viscosity @ 45 S/L with additions of MF Vis, mix in hopper slowly so you do not blind the shaker screens. (2 circulation recommended per sx)								
Carbonate (mg/L)	240.00									
Hydroxyl (mg/L)	68.00	- Add 1 pail of corinox daily on top of mud tanks, as slow as you can through out the day.								
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	18,000.000	-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>								
		-Thanks Dominic								

Product	Units	Qty.
mf vis	25.0 KG	1
mf pac	22.7 KG	3
Lignite	50.0 LB	4
Soltex	50.0 LB	5
Starch	50.0 LB	2
Corinox	20.0 L	2

Well History

Drilled from 650m to 755m, last survey at 740m was 20deg and 310 azm, no problems reported.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$17,667.70
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$2,538.07
Location	Motel Plante				Cumulative	$20,205.77

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Water Based Report

Printed: 10/30/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 10/30/2009 | Report: 12 of 12
Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54
Operator: Petrolia | Well Name: Petrolia | Prov: AB
Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 7
Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #				Drill String				Casing				Mud Volumes	
Size (mm)			215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type			Q505	DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	22.9
Depth In (m)			640	HWDP	102.0	68.0	37.0					String Cap (m³)	3.4
Jets (mm)	9.5	9.5	9.5	DP	102.0	73.0	680.0					Hole (m³)	26.3
	9.5	9.5	9.5									Tanks (m³)	35.5
Hours												Ttl Active (m³)	61.8
ROP (m/hr)				Pump Data		F1000					F1000		
Noz. Vel. (m/sec)			71.2		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.12
Bit HHP (KW)			105.8	Pump 1	140.0	254.0	0.0112	101	1.13				
Jet Impact (N)			2,667.8	Pump 2	140.0	254.0	0.0112	89	0.99	Circ. Pres. (Kpa)			12,100

Properties	06:01 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	861	D.P. + Open	75.4	Surf. to Bit	1.6	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	854.00	D.P. + Casing	67.6	Hole Circ.	12.4				Hole	
Density (kg/m³)	1,075	D.C. #1	147.2	Bottoms Up	10.8				Dumped	
Mud Grad. (kPa/m)	10.55	D.C. #2		Total Active	29.1				Dilution (L/min)	
Temp (°C)	37	Solids Calculations				Solids Equipment				
Vis (sec/L)	48	H. Grav.	0.0 kg/m³		0.0 %		Type		Screens	
600/300	37/29	L. Grav.	124.8 kg/m³		4.7 %	Shaker	derreck		80 80	100
200/100	25/20	Drill Sol.	143.5 kg/m³		5.4 %	Shaker	derrick		80 80	100
6/3	8/7	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)		O.F.. (kg/m³)	L/min
P.V. (mPa-sec)	8.0	Oil / Water	0.0 /		95.2	Centrif	1,075		1,065	
Y.P. (Pa)	10.5	E.C.D.	1,082 kg/m³			Centrif	1,075		1,065	
Gels (10sec/10min)	4.0/7.0	Materials req. for 10 kg/m³ increase		Barite (sacks)	20.7	Cal.Carb. (sacks)				41.3
pH	9.5	Low n (slope)	0.31	High n (slope)	0.35					
Filtrate (cc/30)	10.0	Low K (dyn-sec/cm²)	2.47	High K (dyn-sec/cm²)	1.85					
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.007	-Mix Now: 1sx of soda ash in hopper over 1 circulation to lower calcium.								
Solids (V/frac)	0.048	-Maintain Fluid Loss with: 1sx of aquastar (Starch) over 1hr, 1sxs of soltex over 1hr and 1sxs of lignite over 1hr also, we need to maintain fluid loss 8-10 ml/30min.								
M.B.T. (kg/m³)	0.0									
Alkalinity (pF/mF)	0.25/0.50									
Chlorides (mg/L)	13,000	- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessecary).								
Calcium (mg/L)	160									
pHpA (Kg/m3)	0.0	- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.								
Carbonate (mg/L)	300.00									
Hydroxyl (mg/L)	0.00	-Maintain viscosity @ 45 S/L with additions of MF Vis, mix in hopper slowly so you dont blind the shaker screens. (2 circulation recommended per sx)								
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	14,300.000	- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.								
		-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>								

Product	Units	Qty.
Engineering	1.0 EA	1

Well History

Drilled from 755m to 861m, last survey at 836m was 20deg and 321 azm, no problems reported.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$20,205.77
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$900.00
Location	Motel Plante				Cumulative	$21,105.77

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Water Based Report

Printed: 11/1/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 10/31/2009 | Report: 13 of 14
Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54
Operator: Petrolia | Well Name: Petrolia | Prov: AB
Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 8
Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #				Drill String				Casing				Mud Volumes	
Size (mm)			215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type			Q505	DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	26.5
Depth In (m)			640	HWDP	102.0	68.0	37.0					String Cap (m³)	3.9
Jets (mm)	9.5	9.5	9.5	DP	102.0	73.0	805.0					Hole (m³)	30.3
	9.5	9.5	9.5									Tanks (m³)	65.0
Hours			24.3									Ttl Active (m³)	95.3
ROP (m/hr)			14.3	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)			71.2		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.12
Bit HHP (KW)			105.3	Pump 1	140.0	254.0	0.0112	101	1.13				
Jet Impact (N)			2,655.4	Pump 2	140.0	254.0	0.0112	89	0.99	Circ. Pres. (Kpa)			13,500

Properties	09:06 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	986	D.P. + Open	75.4	Surf. to Bit	1.8	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	960.00	D.P. + Casing	67.6	Hole Circ.	14.3				Hole	
Density (kg/m³)	1,070	D.C. #1	147.2	Bottoms Up	12.5				Dumped	
Mud Grad. (kPa/m)	10.50	D.C. #2		Total Active	45.0				Dilution (L/min)	
Temp (°C)	32	Solids Calculations				Solids Equipment				
Vis (sec/L)	40	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	25/19	L. Grav.	2,483.0 kg/m³		93.7 %	Shaker	derreck	80	80	100
200/100	16/12	Drill Sol.	2,855.5 kg/m³		107.8 %	Shaker	derrick	80	80	100
6/3	4/3	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	6.0	Oil / Water	0.0 /		4.5	Centrif	1,070	1,060		
Y.P. (Pa)	6.5	E.C.D.	1,074 kg/m³			Centrif	1,070	1,060		
Gels (10sec/10min)	3.0/4.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	32.0	Cal.Carb. (sacks)			63.6
pH	9.5	Low n (slope)	0.40		High n (slope)	0.40				
Filtrate (cc/30)	12.0	Low K (dyn-sec/cm²)	0.81		High K (dyn-sec/cm²)	0.88				
Cake (mm)	1.0									
Sand (V/frac)	0.007									
Solids (V/frac)	0.955									
M.B.T. (kg/m³)	0.0									
Alkalinity (pF/mF)	0.30/0.70									
Chlorides (mg/L)	9,500									
Calcium (mg/L)	60									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	360.00									
Hydroxyl (mg/L)	0.00									
Bicarbonate (mg/L)	122.00									
k+ (mg/L)	10,400.000									

Recommendations & Remarks

-Mix Now: 1sx of caustic, 1 MF VIS, and one round of fluid loss recepie. (1 mfpac, 2 soltex)

-Maintain Fluid Loss with: 1sx of MF pac over 1hr, 2sxs of soltex over 1hr, we need to maintain fluid loss 8-10 ml/30min.

- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).

- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.

-Maintain viscosity @ 45 S/L with additions of MF Vis, mix in hopper slowly so you dont blind the shaker screens. (2 circulation recommended per sx)

- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.

-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Product	Units	Qty.
mf vis	25.0 KG	1
mf pac	22.7 KG	2
Barite	40.0 KG	20
Defoamer	20.0 L	2
Caustic Soda	22.7 KG	3
Lignite	50.0 LB	3
Starch	50.0 LB	7
Engineering	1.0 EA	1

Well History

Drilled from 861m to 986m, P.O.O.H for bit at 909m, no problems reported, last survey @ 971m was 19.5deg and 313.4 AZM.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$21,105.77
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$3,520.52
Location	Motel Plante				Cumulative	$24,626.29

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Water Based Report

Printed: 11/1/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 10/31/2009 | Report: 14 of 14
Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54
Operator: Petrolia | Well Name: Petrolia | Prov: AB
Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 8
Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #				Drill String				Casing				Mud Volumes	
Size (mm)			215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type			Q505	DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	27.5
Depth In (m)			640	HWDP	102.0	68.0	37.0					String Cap (m³)	4.1
Jets (mm)	9.5	9.5	9.5	DP	102.0	73.0	844.0					Hole (m³)	31.6
	9.5	9.5	9.5									Tanks (m³)	60.0
Hours			24.3									Ttl Active (m³)	91.6
ROP (m/hr)			15.9	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)			71.2		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.12
Bit HHP (KW)			105.3	Pump 1	140.0	254.0	0.0112	101	1.13				
Jet Impact (N)			2,655.4	Pump 2	140.0	254.0	0.0112	89	0.99	Circ. Pres. (Kpa)			10,900

Properties	18:00 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	1,025	D.P. + Open	75.4	Surf. to Bit	1.9	Dev.	Depth	Az.	Surf.	3.7
T.V. Depth (m)		D.P. + Casing	67.6	Hole Circ.	14.9				Hole	
Density (kg/m³)	1,070	D.C. #1	147.2	Bottoms Up	13.0				Dumped	
Mud Grad. (kPa/m)	10.50	D.C. #2		Total Active	43.2				Dilution (L/min)	
Temp (°C)	32	Solids Calculations				Solids Equipment				
Vis (sec/L)	42	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	34/25	L. Grav.	111.8 kg/m³		4.2 %	Shaker	derreck	80	80	100
200/100	21/17	Drill Sol.	128.6 kg/m³		4.9 %	Shaker	derrick	80	80	100
6/3	5/3	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	9.0	Oil / Water	0.0 /		95.7	Centrif	1,810	1,060		
Y.P. (Pa)	8.0	E.C.D.	1,075 kg/m³			Centrif	1,800	1,060		
Gels (10sec/10min)	3.0/4.0	Materials req. for 10 kg/m³ increase		Barite (sacks)	30.7	Cal.Carb. (sacks)		61.1		
pH	9.5	Low n (slope)	0.46	High n (slope)	0.44					
Filtrate (cc/30)	10.0	Low K (dyn-sec/cm²)	0.75	High K (dyn-sec/cm²)	0.85					
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.009	-Maintain Fluid Loss with: 1sx of MF pac over 1hr, 2sxs of soltex over 1hr, we need to maintain fluid loss 8-10 ml/30min.								
Solids (V/frac)	0.043									
M.B.T. (kg/m³)	0.0	- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).								
Alkalinity (pF/mF)	0.25/0.65									
Chlorides (mg/L)	9,000	- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.								
Calcium (mg/L)	60									
pHpA (Kg/m3)	0.0	-Maintain viscosity @ 45 S/L with additions of MF Vis, mix in hopper slowly so you dont blind the shaker screens. (2 circulation recommended per sx)								
Carbonate (mg/L)	300.00									
Hydroxyl (mg/L)	0.00	- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.								
Bicarbonate (mg/L)	183.00									
k+ (mg/L)	9,500.000	-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>								

Product	Units	Qty.

Well History

Drilled from 986m to 1025m, P.O.O.H for bit at 909m, no problems reported.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$24,626.29
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	
Location	Motel Plante				Cumulative	$24,626.29

The recommendation hereon shall not be construed as authorizing the infringement of any valid patent and are made without assumption of any liability by its agents and are statements of opinions only. Prior to handling or mixing the products recommended in this report, the MSDS for those products must be consulted. In consideration of this report and oral suggestions, it is agreed that Alliance Drilling Fluids Ltd. shall not be liable for any damage resulting from the same and it is to be held harmless.

Water Based Report

Printed: 11/1/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/1/2009 | Report: 15 of 16

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 9

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #				Drill String				Casing				Mud Volumes	
Size (mm)			215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type				DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	28.9
Depth In (m)			640	HWDP	102.0	68.0	37.0					String Cap (m³)	4.3
Jets (mm)	9.5	9.5	9.5	DP	102.0	73.0	892.0					Hole (m³)	33.2
	9.5	9.5	9.5									Tanks (m³)	62.0
Hours			24.3									Ttl Active (m³)	95.2
ROP (m/hr)			17.9	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)			72.7		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.17
Bit HHP (KW)			112.1	Pump 1	140.0	254.0	0.0112	98	1.09				
Jet Impact (N)			2,768.4	Pump 2	140.0	254.0	0.0112	96	1.07	Circ. Pres. (Kpa)			14,000

Properties	08:35 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	1,073	D.P. + Open	77.0	Surf. to Bit	2.0	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	1,041.00	D.P. + Casing	69.0	Hole Circ.	15.3				Hole	
Density (kg/m³)	1,070	D.C. #1	150.3	Bottoms Up	13.3				Dumped	
Mud Grad. (kPa/m)	10.50	D.C. #2		Total Active	43.9				Dilution (L/min)	
Temp (°C)	39	Solids Calculations				Solids Equipment				
Vis (sec/L)	44	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	40/28	L. Grav.	117.0 kg/m³		4.4 %	Shaker	derreck	80	80	100
200/100	24/18	Drill Sol.	134.6 kg/m³		5.1 %	Shaker	derrick	80	80	100
6/3	5/3	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)		L/min
P.V. (mPa-sec)	12.0	Oil / Water	0.0 /		95.5	Centrif	1,810	1,060		
Y.P. (Pa)	8.0	E.C.D.	1,075 kg/m³			Centrif	1,800	1,060		
Gels (10sec/10min)	3.0/5.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	31.9	Cal.Carb. (sacks)			63.4
pH	10.5	Low n (slope)	0.49		High n (slope)	0.51				
Filtrate (cc/30)	9.5	Low K (dyn-sec/cm²)	0.72		High K (dyn-sec/cm³)	0.60				
Cake (mm)	1.0									
Sand (V/frac)	0.009									
Solids (V/frac)	0.045									
M.B.T. (kg/m³)	0.0									
Alkalinity (pF/mF)	1.70/2.50									
Chlorides (mg/L)	9,500									
Calcium (mg/L)	40									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	960.00									
Hydroxyl (mg/L)	306.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	9,000.000									

Product	Units	Qty.
Engineering	1.0 EA	1

Recommendations & Remarks

- Maintain Fluid Loss with: 1sx of MF pac over 1hr, 2sxs of soltex over 1hr, we need to maintain fluid loss 8-10 ml/30min.

- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).

- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.

- Maintain viscosity @ 45 S/L with additions of MF Vis, mix in hopper slowly so you dont blind the shaker screens. (2 circulation recommended per sx)

- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.

-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Well History

Drilled from 1025m to 1073m, no problems reported, last survey @ 1058 was 21.3deg and 317azm.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$26,968.75
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$900.00
Location	Motel Plante				Cumulative	$27,868.75

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Water Based Report

Printed: 11/1/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/1/2009 | Report: 16 of 16
Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54
Operator: Petrolia | Well Name: Petrolia | Prov: AB
Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 9
Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #				Drill String				Casing				Mud Volumes	
Size (mm)			215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type				DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	29.8
Depth In (m)			640	HWDP	102.0	68.0	37.0					String Cap (m³)	4.4
Jets (mm)	9.5	9.5	9.5	DP	102.0	73.0	925.0					Hole (m³)	34.2
	9.5	9.5	9.5									Tanks (m³)	62.0
Hours			24.3									Ttl Active (m³)	96.2
ROP (m/hr)			19.2	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)			72.7		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.17
Bit HHP (KW)			113.1	Pump 1	140.0	254.0	0.0112	98	1.09				
Jet Impact (N)			2,794.3	Pump 2	140.0	254.0	0.0112	96	1.07	Circ. Pres. (Kpa)			15,000

Properties	17:48 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	1,106	D.P. + Open	77.0	Surf. to Bit	2.0	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	1,091.00	D.P. + Casing	69.0	Hole Circ.	15.8	20.90	1,102	315.8	Hole	
Density (kg/m³)	1,080	D.C. #1	150.3	Bottoms Up	13.8				Dumped	
Mud Grad. (kPa/m)	10.59	D.C. #2		Total Active	44.4				Dilution (L/min)	
Temp (°C)	36	Solids Calculations				Solids Equipment				
Vis (sec/L)		H. Grav.	0.0 kg/m³		0.0 %		Type		Screens	
600/300	44/32	L. Grav.	132.6 kg/m³		5.0 %	Shaker	derreck		80	80 100
200/100	26/19	Drill Sol.	152.5 kg/m³		5.8 %	Shaker	derrick		80	80 100
6/3	6/4	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)		O.F.. (kg/m³)	L/min
P.V. (mPa-sec)	12.0	Oil / Water	0.0 /		94.9	Centrif	1,780		1,070	
Y.P. (Pa)	10.0	E.C.D.	1,086 kg/m³			Centrif	1,790		1,070	
Gels (10sec/10min)	2.5/4.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	32.4	Cal.Carb. (sacks)			64.5
pH	10.5	Low n (slope)	0.45		High n (slope)	0.46				
Filtrate (cc/30)	9.5	Low K (dyn-sec/cm²)	1.02		High K (dyn-sec/cm²)	0.96				
Cake (mm)	1.0									
Sand (V/frac)	0.011									
Solids (V/frac)	0.051									
M.B.T. (kg/m³)	0.0									
Alkalinity (pF/mF)	1.80/2.70									
Chlorides (mg/L)	9,500									
Calcium (mg/L)	40									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	1,080.00									
Hydroxyl (mg/L)	306.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	8,550.000									

Product	Units	Qty.
mf pac	22.7 KG	6
Defoamer	20.0 L	6
Caustic Soda	22.7 KG	8
Soltex	50.0 LB	13
T-352	20.0 L	1
Corinox	20.0 L	2

Recommendations & Remarks

- Maintain Fluid Loss with: 1sx of MF pac over 1hr, 2sxs of soltex over 1hr, we need to maintain fluid loss 8-10 ml/30min.

- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).

- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.

- Maintain viscosity @ 45 S/L with additions of MF Vis, mix in hopper slowly so you dont blind the shaker screens. (2 circulation recommended per sx)

- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.

-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Well History

Drilled from 1073m to 1106m, no problems reported, last survey @ 1102 was 20.9deg and 315.8azm.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$27,868.75
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$5,511.54
Location	Motel Plante				Cumulative	$33,380.29

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Water Based Report

Printed: 11/2/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/2/2009 | Report: 17 of 17

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 10

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #				Drill String				Casing				Mud Volumes	
Size (mm)			215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type				DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	31.2
Depth In (m)			640	HWDP	102.0	68.0	37.0					String Cap (m³)	4.6
Jets (mm)	9.5	9.5	9.5	DP	102.0	73.0	973.0					Hole (m³)	35.8
	9.5	9.5	9.5									Tanks (m³)	57.2
Hours			24.3									Ttl Active (m³)	93.0
ROP (m/hr)			21.2	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)			72.7		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.17
Bit HHP (KW)			111.5	Pump 1	140.0	254.0	0.0112	98	1.09				
Jet Impact (N)			2,755.4	Pump 2	140.0	254.0	0.0112	96	1.07	Circ. Pres. (Kpa)			16,200

Properties	06:12 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	1,154	D.P. + Open	77.0	Surf. to Bit	2.1	Dev.	Depth	Az.	Surf.	3.9
T.V. Depth (m)	1,098.00	D.P. + Casing	69.0	Hole Circ.	16.5	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,065	D.C. #1	150.3	Bottoms Up	14.4	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.45	D.C. #2		Total Active	42.9				Dilution (L/min)	
Temp (°C)	31	Solids Calculations				Solids Equipment				
Vis (sec/L)	40	H. Grav.	0.0 kg/m³		0.0 %		Type		Screens	
600/300	26/18	L. Grav.	109.2 kg/m³		4.1 %	Shaker	derreck		80 80	100
200/100	14/10	Drill Sol.	125.6 kg/m³		4.7 %	Shaker	derrick		80 80	100
6/3	3/2	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)		O.F.. (kg/m³)	L/min
P.V. (mPa-sec)	8.0	Oil / Water	0.0 /		95.8	Centrif	1,650		1,055	
Y.P. (Pa)	5.0	E.C.D.	1,068 kg/m³			Centrif	1,680		1,055	
Gels (10sec/10min)	2.0/3.0	Materials req. for 10 kg/m³ increase				Barite (sacks)	31.1	Cal.Carb. (sacks)		61.8
pH	10.5	Low n (slope)	0.48			High n (slope)	0.53			
Filtrate (cc/30)	10.0	Low K (dyn-sec/cm²)	0.48			High K (dyn-sec/cm²)	0.34			
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.005	- Maintain Fluid Loss with: 1sx of MF pac over 1hr, 2sxs of soltex over 1hr, we need to maintain fluid loss 8-10 ml/30min.								
Solids (V/frac)	0.042									
M.B.T. (kg/m³)	0.0	- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).								
Alkalinity (pF/mF)	1.40/2.30									
Chlorides (mg/L)	8,000	- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.								
Calcium (mg/L)	90									
pHpA (Kg/m3)	0.0	- Maintain viscosity @ 45 S/L with additions of MF Vis, mix in hopper slowly so you dont blind the shaker screens. (2 circulation recommended per sx)								
Carbonate (mg/L)	1,080.00									
Hydroxyl (mg/L)	170.00	- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.								
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	3,800.000	-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>								

Product	Units	Qty.
Engineering	1.0 EA	1

Well History

Drilled from 1106m to 1154m, no problems reported, last survey @ 1116 was 21.1deg and 315.3azm. Hole drag 12-15 up/4-7 down and torque on bottom 2400.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$33,380.29
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$900.00
Location	Motel Plante				Cumulative	$34,280.29

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Water Based Report

Alliance Drilling Fluids Ltd.

Printed: 11/3/2009
Version: ADF - 3.0

Report Date: 11/3/2009 | Report: 18 of 18

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 11

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #				Drill String				Casing				Mud Volumes	
Size (mm)			215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type				DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	33.2
Depth In (m)			640	HWDP	102.0	68.0	37.0					String Cap (m³)	4.9
Jets (mm)	9.5	9.5	9.5	DP	102.0	73.0	1,045.0					Hole (m³)	38.1
	9.5	9.5	9.5									Tanks (m³)	50.0
Hours			24.3									Ttl Active (m³)	88.1
ROP (m/hr)			24.2	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)			72.7		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.17
Bit HHP (KW)			112.1	Pump 1	140.0	254.0	0.0112	98	1.09				
Jet Impact (N)			2,768.4	Pump 2	140.0	254.0	0.0112	96	1.07	Circ. Pres. (Kpa)			16,000

Properties	06:26 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	1,226	D.P. + Open	77.0	Surf. to Bit	2.3	Dev.	Depth	Az.	Surf.	4.9
T.V. Depth (m)	1,162.00	D.P. + Casing	69.0	Hole Circ.	17.6	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,070	D.C. #1	150.3	Bottoms Up	15.3	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.50	D.C. #2		Total Active	40.7				Dilution (L/min)	
Temp (°C)	37	Solids Calculations				Solids Equipment				
Vis (sec/L)	44	H. Grav.	0.0 kg/m³		0.0 %		Type		Screens	
600/300	31/21	L. Grav.	117.0 kg/m³		4.4 %	Shaker	derreck		80 80	100
200/100	17/12	Drill Sol.	130.5 kg/m³		4.9 %	Shaker	derrick		80 80	100
6/3	2/1	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)		O.F.. (kg/m³)	L/min
P.V. (mPa-sec)	10.0	Oil / Water	0.0 /		95.5	Centrif	1,700		1,060	
Y.P. (Pa)	5.5	E.C.D.	1,073 kg/m³			Centrif	1,700		1,060	
Gels (10sec/10min)	2.0/3.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	29.5	Cal.Carb. (sacks)			58.7
pH	10.5	Low n (slope)	0.66		High n (slope)	0.56				
Filtrate (cc/30)	9.0	Low K (dyn-sec/cm²)	0.18		High K (dyn-sec/cm²)	0.33				
Cake (mm)	1.0									
Sand (V/frac)	0.011									
Solids (V/frac)	0.045									
M.B.T. (kg/m³)	3.6									
Alkalinity (pF/mF)	1.20/1.70									
Chlorides (mg/L)	8,000									
Calcium (mg/L)	90									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	600.00									
Hydroxyl (mg/L)	238.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	3,400,000									

Product	Units	Qty.
Engineering	1.0 EA	1

Recommendations & Remarks

- Maintain Fluid Loss with: 1sx of MF pac over 1hr, 2sxs of soltex over 1hr, we need to maintain fluid loss 8-10 ml/30min.

- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).

- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.

- Maintain viscosity @ 45 S/L with additions of MF Vis, mix in hopper slowly so you dont blind the shaker screens. (2 circulation recommended per sx)

- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.

-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Well History

Drilled from 1154m to 1226m, no problems reported, last survey @ 1203 was 19.3deg and 315.1azm. Hole drag 15 up/5 down and torque on bottom 3500.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$38,708.27
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$900.00
Location	Motel Plante				Cumulative	$39,608.27

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Water Based Report

Printed: 11/4/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/3/2009 | Report: 19 of 19

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 11

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #				Drill String				Casing				Mud Volumes	
Size (mm)			215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type				DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	34.6
Depth In (m)			640	HWDP	102.0	68.0	37.0					String Cap (m³)	5.1
Jets (mm)	9.5	9.5	9.5	DP	102.0	73.0	1,096.0					Hole (m³)	39.8
	9.5	9.5	9.5									Tanks (m³)	48.0
Hours			4.5									Ttl Active (m³)	87.8
ROP (m/hr)			141.6	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)			72.7		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.17
Bit HHP (KW)			112.1	Pump 1	140.0	254.0	0.0112	98	1.09				
Jet Impact (N)			2,768.4	Pump 2	140.0	254.0	0.0112	96	1.07	Circ. Pres. (Kpa)			16,000

Properties	17:12 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	1,277	D.P. + Open	77.0	Surf. to Bit	2.4	Dev.	Depth	Az.	Surf.	0.5
T.V. Depth (m)	1,213.00	D.P. + Casing	69.0	Hole Circ.	18.4	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,070	D.C. #1	150.3	Bottoms Up	16.0	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.50	D.C. #2		Total Active	40.5				Dilution (L/min)	
Temp (°C)	44	Solids Calculations				Solids Equipment				
Vis (sec/L)	44	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	34/23	L. Grav.	117.0 kg/m³		4.4 %	Shaker	derreck	80	80	100
200/100	18/12	Drill Sol.	130.5 kg/m³		4.9 %	Shaker	derrick	80	80	100
6/3	3/2	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	11.0	Oil / Water	0.0 /		95.5	Centrif	1,700	1,060		
Y.P. (Pa)	6.0	E.C.D.	1,074 kg/m³			Centrif	1,700	1,060		
Gels (10sec/10min)	2.0/3.0	Materials req. for 10 kg/m³ increase		Barite (sacks)	29.4	Cal.Carb. (sacks)				58.5
pH	10.5	Low n (slope)	0.53	High n (slope)	0.56					
Filtrate (cc/30)	9.5	Low K (dyn-sec/cm²)	0.44	High K (dyn-sec/cm²)	0.36					
Cake (mm)	1.0									
Sand (V/frac)	0.009									
Solids (V/frac)	0.045									
M.B.T. (kg/m³)	3.6									
Alkalinity (pF/mF)	1.80/2.10									
Chlorides (mg/L)	8,200									
Calcium (mg/L)	100									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	360.00									
Hydroxyl (mg/L)	510.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	3,230.000									

Product	Units	Qty.

Recommendations & Remarks

- Maintain Fluid Loss with: 1sx of MF pac over 1hr, we need to maintain fluid loss 8-10 ml/30min.
- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).
- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.
- Maintain viscosity @ 40-45 S/L with additions of MF Vis, mix in hopper slowly so you dont blind the shaker screens. (2 circulation recommended per sx)
- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.
- <MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Well History

Drilled from 1226m to 1277m, no problems reported, last survey @ 1260.91 was 20deg and 314azm. Hole drag 15 up/6 down and torque on bottom 3200.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$39,608.27
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	
Location	Motel Plante				Cumulative	$39,608.27

The recommendation hereon shall not be construed as authorizing the infringement of any valid patent and are made without assumption of any liability by its agents and are statements of opinions only. Prior to handling or mixing the products recommended in this report, the MSDS for those products must be consulted. In consideration of this report and oral suggestions, it is agreed that Alliance Drilling Fluids Ltd. shall not be liable for any damage resulting from the same and it is to be held harmless.

Water Based Report

Printed: 11/4/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/4/2009 | Report: 20 of 20

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 12

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	4	Drill String				Casing				Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	ms1613ubpx	DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	35.7
Depth In (m)	1,174	HWDP	102.0	68.0	37.0					String Cap (m³)	5.3
Jets (mm)	9.5 9.5 9.5	DP	102.0	73.0	1,137.0					Hole (m³)	41.0
	9.5 9.5 9.5									Tanks (m³)	44.0
Hours	10.0									Ttl Active (m³)	85.0
ROP (m/hr)	14.4	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	72.7		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.17
Bit HHP (KW)	112.6	Pump 1	140.0	254.0	0.0112	98	1.09				
Jet Impact (N)	2,781.3	Pump 2	140.0	254.0	0.0112	96	1.07	Circ. Pres. (Kpa)			16,700

Properties	06:17 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	1,318	D.P. + Open	77.0	Surf. to Bit	2.4	Dev.	Depth	Az.	Surf.	2.7
T.V. Depth (m)	1,271.00	D.P. + Casing	69.0	Hole Circ.	18.9	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,075	D.C. #1	150.3	Bottoms Up	16.5	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.55	D.C. #2		Total Active	39.2				Dilution (L/min)	
Temp (°C)	47	Solids Calculations				Solids Equipment				
Vis (sec/L)	44	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	42/29	L. Grav.	132.6 kg/m³		5.0 %	Shaker	derreck	80	80	100
200/100	24/17	Drill Sol.	148.4 kg/m³		5.6 %	Shaker	derrick	80	80	100
6/3	3/2	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	13.0	Oil / Water	0.0 /		94.9	Centrif	1,730	1,070		
Y.P. (Pa)	8.0	E.C.D.	1,080 kg/m³			Centrif	1,740	1,070		
Gels (10sec/10min)	2.5/4.0	Materials req. for 10 kg/m³ increase				Barite (sacks)	28.5	Cal.Carb. (sacks)		56.8
pH	10.0	Low n (slope)	0.58			High n (slope)	0.53			
Filtrate (cc/30)	9.0	Low K (dyn-sec/cm²)	0.40			High K (dyn-sec/cm²)	0.55			
Cake (mm)	1.0									
Sand (V/frac)	0.011									
Solids (V/frac)	0.051									
M.B.T. (kg/m³)	3.6									
Alkalinity (pF/mF)	1.90/2.50									
Chlorides (mg/L)	9,000									
Calcium (mg/L)	120									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	720.00									
Hydroxyl (mg/L)	442.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	3,230.000									

Product	Units	Qty.
mf pac	22.7 KG	1
Caustic Soda	22.7 KG	1
Engineering	1.0 EA	1

Recommendations & Remarks

- Maintain Fluid Loss with: 1sx of MF pac over 1hr, we need to maintain fluid loss 8-10 ml/30min.
- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).
- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.
- Maintain viscosity @ 40-45 S/L with additions of MF Vis, mix in hopper slowly so you dont blind the shaker screens. (2 circulation recommended per sx)
- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.
- <MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Well History

Drilled from 1277m to 1318m, no problems reported, last survey @ 1299.55 was 19.6deg and 317.6azm. Hole drag 18 up/7 down and torque on bottom 2900.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$39,608.27
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$1,153.05
Location	Motel Plante				Cumulative	$40,761.32

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Water Based Report

Printed: 11/6/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/5/2009 | Report: 21 of 22
Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54
Operator: Petrolia | Well Name: Petrolia | Prov: AB
Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 13
Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	4	Drill String				Casing				Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	ms1616wm	DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	37.3
Depth In (m)	1,174	HWDP	102.0	68.0	37.0					String Cap (m³)	5.5
Jets (mm)	11.9 11.9 11.9	DP	102.0	73.0	1,193.0					Hole (m³)	42.8
	11.9 11.9 11.9									Tanks (m³)	44.0
Hours										Ttl Active (m³)	86.8
ROP (m/hr)		Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	54.1		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.17
Bit HHP (KW)	61.9	Pump 1	140.0	254.0	0.0112	98	1.09				
Jet Impact (N)	2,058.4	Pump 2	140.0	254.0	0.0112	96	1.07	Circ. Pres. (Kpa)			17,300

Properties	06:15 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	1,374	D.P. + Open	77.0	Surf. to Bit	2.6	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	1,327.00	D.P. + Casing	69.0	Hole Circ.	19.8	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,070	D.C. #1	150.3	Bottoms Up	17.2	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.50	D.C. #2		Total Active	40.1				Dilution (L/min)	
Temp (°C)	41	Solids Calculations				Solids Equipment				
Vis (sec/L)	40	H. Grav.	0.0 kg/m³		0.0 %		Type		Screens	
600/300	33/23	L. Grav.	117.0 kg/m³		4.4 %	Shaker	derreck		80 80	100
200/100	18/12	Drill Sol.	132.1 kg/m³		5.0 %	Shaker	derrick		80 80	100
6/3	2/1	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)		O.F.. (kg/m³)	L/min
P.V. (mPa-sec)	10.0	Oil / Water	0.0 /		95.5	Centrif	1,730		1,060	
Y.P. (Pa)	6.5	E.C.D.	1,073 kg/m³			Centrif	1,740		1,060	
Gels (10sec/10min)	1.0/2.0	Materials req. for 10 kg/m³ increase				Barite (sacks)	29.1	Cal.Carb. (sacks)		57.9
pH	10.5	Low n (slope)	0.68			High n (slope)	0.52			
Filtrate (cc/30)	10.0	Low K (dyn-sec/cm²)	0.17			High K (dyn-sec/cm²)	0.47			
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.005									
Solids (V/frac)	0.045									
M.B.T. (kg/m³)	2.1									
Alkalinity (pF/mF)	2.00/1.80									
Chlorides (mg/L)	7,500									
Calcium (mg/L)	80									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	-240.00									
Hydroxyl (mg/L)	748.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	2,500.000									

- Maintain Fluid Loss with: 1sx of MF pac over 1hr, we need to maintain fluid loss 8-10 ml/30min.
- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).
- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.
- Maintain viscosity @ 40-45 S/L with additions of MF Vis, mix in hopper slowly so you dont blind the shaker screens. (2 circulation recommended per sx)
- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.
-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Product	Units	Qty.
mf pac	22.7 KG	1
Defoamer	20.0 L	4
Caustic Soda	22.7 KG	2
Engineering	1.0 EA	1

Well History

Drilled from 1318m to 1374m, P.O.O.H at 1328m to change bit, no proplems reported. Hole drag 18 up/7 down and torque on bottom 3000.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$40,761.32
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$1,613.01
Location	Motel Plante				Cumulative	$42,374.33

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Water Based Report

Printed: 11/6/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/5/2009 | Report: 22 of 22

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 13

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	4	Drill String				Casing				Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	ms1616wm	DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	38.2
Depth In (m)	1,174	HWDP	102.0	68.0	37.0					String Cap (m³)	5.7
Jets (mm)	11.9 11.9 11.9	DP	102.0	73.0	1,228.0					Hole (m³)	43.9
	11.9 11.9 11.9									Tanks (m³)	40.5
Hours										Ttl Active (m³)	84.4
ROP (m/hr)		Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	54.1		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.17
Bit HHP (KW)	61.9	Pump 1	140.0	254.0	0.0112	98	1.09				
Jet Impact (N)	2,058.4	Pump 2	140.0	254.0	0.0112	96	1.07	Circ. Pres. (Kpa)			18,800

Properties	16:51 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	1,409	D.P. + Open	77.0	Surf. to Bit	2.6	Dev.	Depth	Az.	Surf.	2.5
T.V. Depth (m)	1,362.00	D.P. + Casing	69.0	Hole Circ.	20.3	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,070	D.C. #1	150.3	Bottoms Up	17.7	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.50	D.C. #2		Total Active	39.0				Dilution (L/min)	

		Solids Calculations				Solids Equipment				
Temp (°C)	43						Type	Screens		
Vis (sec/L)	44	H. Grav.	0.0 kg/m³	0.0 %						
600/300	41/26	L. Grav.	117.0 kg/m³	4.4 %		Shaker	derreck	80	80	100
200/100	21/13	Drill Sol.	132.1 kg/m³	5.0 %		Shaker	derrick	80	80	100
6/3	2/1	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	15.0	Oil / Water	0.0 /	95.5		Centrif	1,730	1,060		
Y.P. (Pa)	5.5	E.C.D.	1,074 kg/m³			Centrif	1,740	1,060		
Gels (10sec/10min)	2.0/3.0	Materials req. for 10 kg/m³ increase		Barite (sacks)	28.3	Cal.Carb. (sacks)				56.3
pH	10.0	Low n (slope)	0.71	High n (slope)	0.66					
Filtrate (cc/30)	10.0	Low K (dyn-sec/cm²)	0.16	High K (dyn-sec/cm²)	0.22					
Cake (mm)	1.0									
Sand (V/frac)	0.007									
Solids (V/frac)	0.045									
M.B.T. (kg/m³)	2.1									
Alkalinity (pF/mF)	1.60/1.90									
Chlorides (mg/L)	7,500									
Calcium (mg/L)	80									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	360.00									
Hydroxyl (mg/L)	442.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	2,500.000									

Product	Units	Qty.

Recommendations & Remarks

- Maintain Fluid Loss with: 1sx of MF pac over 1hr, we need to maintain fluid loss 8-10 ml/30min.
- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).
- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.
- Maintain viscosity @ 40-45 S/L with additions of MF Vis, mix in hopper slowly so you dont blind the shaker screens. (2 circulation recommended per sx)
- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.
- <MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Well History

Drilled from 1374m to 1409m, no proplems reported. Hole drag 18 up/7 down and torque on bottom 3000.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$42,374.33
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	
Location	Motel Plante				Cumulative	$42,374.33

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Water Based Report

Printed: 11/7/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/6/2009 | Report: 23 of 23

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 14

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	4	Drill String				Casing				Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	ms1616wm	DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	41.2
Depth In (m)	1,174	HWDP	102.0	68.0	37.0					String Cap (m³)	6.1
Jets (mm)	11.9 11.9 11.9	DP	102.0	73.0	1,332.0					Hole (m³)	47.3
	11.9 11.9 11.9									Tanks (m³)	48.0
Hours	11.3									Ttl Active (m³)	95.3
ROP (m/hr)	30.0	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	54.1		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.17
Bit HHP (KW)	61.9	Pump 1	140.0	254.0	0.0112	98	1.09				
Jet Impact (N)	2,058.4	Pump 2	140.0	254.0	0.0112	96	1.07	Circ. Pres. (Kpa)			18,900

Properties	17:00 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	1,513	D.P. + Open	77.0	Surf. to Bit	2.8	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	1,466.00	D.P. + Casing	69.0	Hole Circ.	21.8	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,070	D.C. #1	150.3	Bottoms Up	19.0	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.50	D.C. #2		Total Active	44.0				Dilution (L/min)	
Temp (°C)	43	Solids Calculations				Solids Equipment				
Vis (sec/L)	44	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	30/19	L. Grav.	117.0 kg/m³		4.4 %	Shaker	derreck	80	80	100
200/100	15/9	Drill Sol.	132.9 kg/m³		5.0 %	Shaker	derrick	80	80	100
6/3	2/1	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	11.0	Oil / Water	0.0 /		95.5	Centrif	1,730	1,060		
Y.P. (Pa)	4.0	E.C.D.	1,073 kg/m³			Centrif	1,740	1,060		
Gels (10sec/10min)	2.0/3.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	31.9	Cal.Carb. (sacks)			63.5
pH	10.0	Low n (slope)	0.64		High n (slope)	0.66				
Filtrate (cc/30)	10.0	Low K (dyn-sec/cm²)	0.18		High K (dyn-sec/cm²)	0.16				
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.004	- Maintain Fluid Loss with: 1sx of MF pac over 1hr, we need to maintain fluid loss 8-10 ml/30min.								
Solids (V/frac)	0.045	- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).								
M.B.T. (kg/m³)	1.4	- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.								
Alkalinity (pF/mF)	1.50/1.80									
Chlorides (mg/L)	6,500									
Calcium (mg/L)	80	- Maintain viscosity @ 40-45 S/L with additions of MF Vis, mix in hopper slowly so you dont blind the shaker screens. (2 circulation recommended per sx)								
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	360.00	- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.								
Hydroxyl (mg/L)	408.00									
Bicarbonate (mg/L)	0.00	-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>								
k+ (mg/L)	2,090.000									

Product	Units	Qty.
mf pac	22.7 KG	6
Defoamer	20.0 L	3
Caustic Soda	22.7 KG	2
T-352	20.0 L	2
Corinox	20.0 L	1

Well History

Drilled from 1409m to 1514m, P.O.O.H @ 1443m to changa bit, no proplems reported. Hole drag 18 up/10 down and torque on bottom 4200.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$42,374.33
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$2,353.10
Location	Motel Plante				Cumulative	$44,727.43

The recommendation hereon shall not be construed as authorizing the infringement of any valid patent and are made without assumption of any liability by its agents and are statements of opinions only. Prior to handling or mixing the products recommended in this report, the MSDS for those products must be consulted. In consideration of this report and oral suggestions, it is agreed that Alliance Drilling Fluids Ltd. shall not be liable for any damage resulting from the same and it is to be held harmless.

Water Based Report

Printed: 11/8/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/7/2009 | Report: 24 of 25
Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54
Operator: Petrolia | Well Name: Petrolia | Prov: AB
Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 15
Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	4	Drill String				Casing				Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	ms1616wm	DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	44.3
Depth In (m)	1,174	HWDP	102.0	68.0	37.0					String Cap (m³)	6.6
Jets (mm)	11.9 11.9 11.9	DP	102.0	73.0	1,444.0					Hole (m³)	50.9
	11.9 11.9 11.9									Tanks (m³)	48.0
Hours	9.7									Ttl Active (m³)	98.9
ROP (m/hr)	46.5	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	54.1		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.17
Bit HHP (KW)	62.2	Pump 1	140.0	254.0	0.0112	98	1.09				
Jet Impact (N)	2,068.0	Pump 2	140.0	254.0	0.0112	96	1.07	Circ. Pres. (Kpa)			19,000

Properties	06:07 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	1,625	D.P. + Open	77.0	Surf. to Bit	3.0	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	1,578.00	D.P. + Casing	69.0	Hole Circ.	23.5	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,075	D.C. #1	150.3	Bottoms Up	20.5	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.55	D.C. #2		Total Active	45.7				Dilution (L/min)	
Temp (°C)	42	Solids Calculations				Solids Equipment				
Vis (sec/L)		H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	42/28	L. Grav.	124.8 kg/m³		4.7 %	Shaker	derreck	80	80	100
200/100	21/14	Drill Sol.	141.1 kg/m³		5.3 %	Shaker	derrick	80	80	100
6/3	2/1	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	14.0	Oil / Water	0.0 /		95.2	Centrif	1,730	1,060		
Y.P. (Pa)	7.0	E.C.D.	1,079 kg/m³			Centrif	1,740	1,060		
Gels (10sec/10min)	2.0/3.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	33.2	Cal.Carb. (sacks)			66.1
pH	10.0	Low n (slope)	0.72		High n (slope)	0.58				
Filtrate (cc/30)	9.5	Low K (dyn-sec/cm²)	0.16		High K (dyn-sec/cm²)	0.38				
Cake (mm)	1.0									
Sand (V/frac)	0.009									
Solids (V/frac)	0.048									
M.B.T. (kg/m³)	2.1									
Alkalinity (pF/mF)	1.60/1.70									
Chlorides (mg/L)	6,000									
Calcium (mg/L)	80									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	120.00									
Hydroxyl (mg/L)	510.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	1,900.000									

Product	Units	Qty.
mf vis	25.0 KG	2
mf pac	22.7 KG	4
Caustic Soda	22.7 KG	1
Corinox	20.0 L	1
Engineering	1.0 EA	1

Recommendations & Remarks

- Maintain Fluid Loss with: 1sx of MF pac over 1hr and half, and one aquastar over one hour and half, we need to maintain fluid loss 8-10 ml/30min.

- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).

- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.

- Maintain viscosity @ 40-45 S/L with additions of MF Vis, mix in hopper slowly so you dont blind the shaker screens. (2 circulation recommended per sx)

- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.

-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Well History

Drilled from 1514m to 1625m, no proplems reported. Hole drag 22 up/7 down and torque on bottom 4600.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$44,727.43
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	$2,508.67
Location	Motel Plante				Cumulative	$47,236.10

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Water Based Report

Printed: 11/8/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/7/2009 | Report: 25 of 25

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 15

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	4	Drill String				Casing				Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	ms1616wm	DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	46.3
Depth In (m)	1,174	HWDP	102.0	68.0	37.0					String Cap (m³)	6.9
Jets (mm)	11.9 11.9 11.9	DP	102.0	73.0	1,516.0					Hole (m³)	53.2
	11.9 11.9 11.9									Tanks (m³)	54.2
Hours	24.0									Ttl Active (m³)	107.4
ROP (m/hr)	21.8	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	54.1		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.17
Bit HHP (KW)	61.9	Pump 1	140.0	254.0	0.0112	98	1.09				
Jet Impact (N)	2,058.4	Pump 2	140.0	254.0	0.0112	96	1.07	Circ. Pres. (Kpa)			19,000

Properties	17:08 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	1,697	D.P. + Open	77.0	Surf. to Bit	3.2	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	1,650.00	D.P. + Casing	69.0	Hole Circ.	24.6	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,070	D.C. #1	150.3	Bottoms Up	21.4	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.50	D.C. #2		Total Active	49.6				Dilution (L/min)	

		Solids Calculations				Solids Equipment				
Temp (°C)	41						Type	Screens		
Vis (sec/L)	45	H. Grav.	0.0 kg/m³	0.0 %						
600/300	36/24	L. Grav.	117.0 kg/m³	4.4 %		Shaker	derreck	80	80	100
200/100	18/12	Drill Sol.	132.1 kg/m³	5.0 %		Shaker	derrick	80	80	100
6/3	2/1	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	12.0	Oil / Water	0.0 /	95.5		Centrif	1,730	1,060		
Y.P. (Pa)	6.0	E.C.D.	1,073 kg/m³			Centrif	1,740	1,060		
Gels (10sec/10min)	2.0/3.0	Materials req. for 10 kg/m³ increase		Barite (sacks)	36.0	Cal.Carb. (sacks)				71.6
pH	10.5	Low n (slope)	0.69	High n (slope)	0.58					
Filtrate (cc/30)	10.0	Low K (dyn-sec/cm²)	0.17	High K (dyn-sec/cm²)	0.32					
Cake (mm)	1.0									
Sand (V/frac)	0.009									
Solids (V/frac)	0.045									
M.B.T. (kg/m³)	2.1									
Alkalinity (pF/mF)	1.80/2.10									
Chlorides (mg/L)	5,500									
Calcium (mg/L)	90									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	360.00									
Hydroxyl (mg/L)	510.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	1,700.000									

Product	Units	Qty.

Recommendations & Remarks

- Maintain Fluid Loss with: 1sx of MF pac over 1hr and half, and one aquastar over one hour and half, we need to maintain fluid loss 8-10 ml/30min.

- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).

- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.

- Maintain viscosity @ 40-45 S/L with additions of MF Vis, mix in hopper slowly so you dont blind the shaker screens. (2 circulation recommended per sx)

- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.

-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Well History

Drilled from 1625m to 1697m, no proplems reported. Hole drag 22 up/8 down and torque on bottom 5200.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$47,236.10
Home	(780) 518-1250	Cell	(581) 888-1041		Daily	
Location	Motel Plante				Cumulative	$47,236.10

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Water Based Report

Printed: 11/9/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/8/2009 | Report: 26 of 26

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 16

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	9	Drill String				Casing				Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	ms1616wm	DC	167.0	59.0	144.0	Surface	244.5	224.4	212	Annulus (m³)	47.0
Depth In (m)	1,174	HWDP	102.0	68.0	37.0					String Cap (m³)	7.0
Jets (mm)	9.5 9.5 9.5	DP	102.0	73.0	1,541.0					Hole (m³)	54.0
	9.5 9.5 9.5									Tanks (m³)	54.8
Hours	2.0									Ttl Active (m³)	108.8
ROP (m/hr)	274.0	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	84.9		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			2.17
Bit HHP (KW)	153.2	Pump 1	140.0	254.0	0.0112	98	1.09				
Jet Impact (N)	3,244.9	Pump 2	140.0	254.0	0.0112	96	1.07	Circ. Pres. (Kpa)			16,900

Properties	18:46 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	1,722	D.P. + Open	77.0	Surf. to Bit	3.2	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	1,675.00	D.P. + Casing	69.0	Hole Circ.	25.0	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,075	D.C. #1	150.3	Bottoms Up	21.7	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.55	D.C. #2		Total Active	50.3				Dilution (L/min)	
Temp (°C)	33	Solids Calculations				Solids Equipment				
Vis (sec/L)	45	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	33/21	L. Grav.	124.8 kg/m³		4.7 %	Shaker	derreck	80	80	100
200/100	17/10	Drill Sol.	141.1 kg/m³		5.3 %	Shaker	derrick	80	80	100
6/3	2/1	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	12.0	Oil / Water	0.0 /		95.2	Centrif	1,730	1,060		
Y.P. (Pa)	4.5	E.C.D.	1,078 kg/m³			Centrif	1,740	1,060		
Gels (10sec/10min)	1.0/2.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	36.5	Cal.Carb. (sacks)			72.8
pH	10.0	Low n (slope)	0.66		High n (slope)	0.65				
Filtrate (cc/30)	9.5	Low K (dyn-sec/cm²)	0.18		High K (dyn-sec/cm²)	0.19				
Cake (mm)	1.0									
Sand (V/frac)	0.010									
Solids (V/frac)	0.048									
M.B.T. (kg/m³)	2.1									
Alkalinity (pF/mF)	1.30/1.80									
Chlorides (mg/L)	5,500									
Calcium (mg/L)	40									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	600.00									
Hydroxyl (mg/L)	272.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	1,600.000									

Product	Units	Qty.
mf pac	22.7 KG	4
Defoamer	20.0 L	3
Caustic Soda	22.7 KG	4
Starch	50.0 LB	4
T-352	20.0 L	-1
Corinox	20.0 L	-2
Engineering	1.0 EA	1

Recommendations & Remarks

- Maintain Fluid Loss with: 1sx of MF pac over 1hr and half, and one aquastar over one hour and half, we need to maintain fluid loss 8-10 ml/30min.

- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).

- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.

- Maintain viscosity @ 40-45 S/L with additions of MF Vis, mix in hopper slowly so you dont blind the shaker screens. (2 circulation recommended per sx)

- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.

-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Well History

Drilled from 1697m to 1722m, no proplems reported. Hole drag 18 up/12 down.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$47,236.10
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	$2,112.63
Location	Edson				Cumulative	$49,348.73

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Water Based Report

Printed: 11/9/2009
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Alliance Drilling Fluids Ltd.

Report Date: 11/9/2009 | Report: 27 of 27
Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54
Operator: Petrolia | Well Name: Petrolia | Prov: AB
Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 17
Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	8	Drill String				Casing				Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	mfs-613	DC	167.0	59.0	164.0	Surface	244.5	224.4	212	Annulus (m³)	49.4
Depth In (m)	1,174	HWDP	102.0	68.0	93.0					String Cap (m³)	7.3
Jets (mm)	9.5 9.5 9.5	DP	102.0	73.0	1,560.0					Hole (m³)	56.8
	9.5 9.5 9.5									Tanks (m³)	52.0
Hours	2.0									Ttl Active (m³)	108.8
ROP (m/hr)	321.5	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	64.4		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			1.64
Bit HHP (KW)	67.5	Pump 1	152.0	254.0	0.0132	125	1.64				
Jet Impact (N)	1,880.6	Pump 2	140.0	254.0	0.0112	0	0.00	Circ. Pres. (Kpa)			15,400

Properties	19:15 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	1,817	D.P. + Open	58.4	Surf. to Bit	4.4	Dev.	Depth	Az.	Surf.	0.2
T.V. Depth (m)	1,770.00	D.P. + Casing	52.4	Hole Circ.	34.5	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,080	D.C. #1	114.2	Bottoms Up	30.1	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.59	D.C. #2		Total Active	66.1				Dilution (L/min)	
Temp (°C)	31	Solids Calculations				Solids Equipment				
Vis (sec/L)	51	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	42/28	L. Grav.	132.6 kg/m³		5.0 %	Shaker	derreck	80	80	100
200/100	21/14	Drill Sol.	149.2 kg/m³		5.6 %	Shaker	derrick	80	80	100
6/3	2/1	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	14.0	Oil / Water	0.0 /		94.9	Centrif	1,820	1,070		
Y.P. (Pa)	7.0	E.C.D.	1,083 kg/m³			Centrif	1,800	1,070		
Gels (10sec/10min)	2.0/3.0	Materials req. for 10 kg/m³ increase				Barite (sacks)	36.6	Cal.Carb. (sacks)		73.0
pH	10.0	Low n (slope)	0.72			High n (slope)	0.58			
Filtrate (cc/30)	9.0	Low K (dyn-sec/cm²)	0.16			High K (dyn-sec/cm²)	0.38			
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.010	- Maintain Fluid Loss with: 1sx of MF pac over 1hr, and one aquastar over one hour, we need to maintain fluid loss 8-10 ml/30min.								
Solids (V/frac)	0.051									
M.B.T. (kg/m³)	2.9	- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).								
Alkalinity (pF/mF)	1.50/1.90									
Chlorides (mg/L)	5,500	- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.								
Calcium (mg/L)	60									
pHpA (Kg/m3)	0.0	- Maintain viscosity @ 55 S/L with additions of MF Vis, mix in hopper slowly (1hr) so you dont blind the shaker screens. (1 circulation recommended per sx)								
Carbonate (mg/L)	480.00									
Hydroxyl (mg/L)	374.00	- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.								
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	1,500.000	-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>								

Product	Units	Qty.
Engineering	1.0 EA	1

Well History

Drilled from 1722m to 1817m, no proplems reported.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$49,348.73
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	$900.00
Location	Edson				Cumulative	$50,248.73

The recommendation hereon shall not be construed as authorizing the infringement of any valid patent and are made without assumption of any liability by its agents and are statements of opinions only. Prior to handling or mixing the products recommended in this report, the MSDS for those products must be consulted. In consideration of this report and oral suggestions, it is agreed that Alliance Drilling Fluids Ltd. shall not be liable for any damage resulting from the same and it is to be held harmless.

Oil Based Report

Printed: 11/12/2009
Version: ADF - 4.0

Alliance Drilling Fluids Ltd.

Report Date: 11/10/2009 | Report: 28 of 30

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 18

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	10	Drill String				Casing			Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)	OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	rsr616d-e1	DC	167.0	59.0	164.0	Surface 244.5	224.4	212	Annulus (m³)	52.4
Depth In (m)	1,174	HWD	102.0	68.0	93.0				String Cap (m³)	7.8
Jets (mm)	9.5 9.5 9.5	DP	102.0	73.0	1,665.0				Hole (m³)	60.2
	9.5 9.5 9.5								Tanks (m³)	49.4
Hours									Ttl Active (m³)	109.6
ROP (m/hr)		Pump Data	F1000				F1000			
Noz. Vel. (m/sec)	64.4		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)		1.64
Bit HHP (KW)	66.2	Pump 1	152.0	254.0	0.0132	125	1.64			
Jet Impact (N)	1,845.8	Pump 2	140.0	254.0	0.0112	0	0.00	Circ. Pres. (Kpa)		12,700

Properties	06:14 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	1,922	D.P. + Open	58.4	Surf. to Bit	4.7	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	0.00	D.P. + Casing	52.4	Hole Circ.	36.6	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,060	D.C. #1	114.2	Bottoms Up	31.9	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.40	D.C. #2		Total Active	66.6				Total	
Temp (°C)	34	Solids Calculations				Solids Equipment				
Vis (sec/L)	48	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	37/25	L. Grav.	98.8 kg/m³		3.7 %	Shaker	derreck	175	140	140
200/100	21/14					Shaker	derrick	175	140	140
6/3	3/2	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	12.0	Oil / Water	0.0 /		96.2	Centrif	1,630	1,050		
Y.P. (Pa)	6.5	E.C.D.	1,063 kg/m³			Centrif	1,620	1,050		
Gels (10/10 Pa)	2.0/4.0	Materials req. for 10 kg/m³ increase		Barite (sacks)	37	Cal.Carb. (sacks)		73		
HTHP (cc/30)		Base Oil Density (kg/m³)		Low n (slope)	0.55	High n (slope)		0.57		
HTHP (°C)				Low K (dyn-sec/cm²)	0.43	High K (dyn-sec/cm²)		0.39		
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.0040	- Maintain Fluid Loss with: 1sx of MF pac over 1hr, and one aquastar over one hour, we need to maintain fluid loss 8-10 ml/30min.								
Corr. Solids (V/frac)	0.0337									
Chl -Wh.Mud (mg/L)	4,500	- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).								
Calcium (mg/L)	80									
Excess Lime (kg/m³)		- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.								
E.S. (volts)										
Salinity (%)	0.7	- Maintain viscosity @ 55 S/L with additions of MF Vis, mix in hopper slowly (1hr) so you dont blind the shaker screens. (1 circulation recommended per sx)								
Activity (V/frac)	1.036									
Oil:Water (ratio)	0.0 / 100.0	- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.								
Water Ph Chl (mg/L)	4,671									
k+ (mg/L)	1,200.000	-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>								

Product	Units	Qty.
mf vis	25.0 KG	1
mf pac	22.7 KG	1
Caustic Soda	22.7 KG	2
Starch	50.0 LB	1
Engineering	1.0 EA	1

Well History

Drilled from 1817m to 1922m, no proplems reported. Hole drag 45up/15dowm and torque on bottom 7400.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$50,248.73
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	$1,655.15
Location	Edson				Cumulative	$51,903.88

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Water Based Report

Printed: 11/12/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/12/2009 | Report: 30 of 30

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 20

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	10	Drill String				Casing				Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	rsr616d-e1	DC	167.0	59.0	164.0	Surface	244.5	224.4	212	Annulus (m³)	55.0
Depth In (m)	1,174	HWDP	102.0	68.0	93.0					String Cap (m³)	8.1
Jets (mm)	9.5 9.5 9.5	DP	102.0	73.0	1,759.0					Hole (m³)	63.2
	9.5 9.5 9.5									Tanks (m³)	60.0
Hours	12.0									Ttl Active (m³)	123.2
ROP (m/hr)	70.2	Pump Data	F1000					F1000			
Noz. Vel. (m/sec)	64.4		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			1.64
Bit HHP (KW)	66.5	Pump 1	152.0	254.0	0.0132	125	1.64				
Jet Impact (N)	1,854.5	Pump 2	140.0	254.0	0.0112	0	0.00	Circ. Pres. (Kpa)			12,800

Properties	06:13 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	2,016	D.P. + Open	58.4	Surf. to Bit	5.0	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	0.00	D.P. + Casing	52.4	Hole Circ.	38.4	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,065	D.C. #1	114.2	Bottoms Up	33.5	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.45	D.C. #2		Total Active	74.9				Dilution (L/min)	
Temp (°C)	32	Solids Calculations				Solids Equipment				
Vis (sec/L)	51	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	43/31	L. Grav.	109.2 kg/m³		4.1 %	Shaker	derreck	175	140	140
200/100	25/18	Drill Sol.	123.1 kg/m³		4.6 %	Shaker	derrick	175	140	140
6/3	5/4	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	12.0	Oil / Water	0.0 /		95.8	Centrif	1,630	1,060		
Y.P. (Pa)	9.5	E.C.D.	1,069 kg/m³			Centrif	1,620	1,060		
Gels (10sec/10min)	3.0/5.0	Materials req. for 10 kg/m³ increase				Barite (sacks)	41.2	Cal.Carb. (sacks)		81.9
pH	10.5	Low n (slope)	0.44			High n (slope)	0.47			
Filtrate (cc/30)	10.0	Low K (dyn-sec/cm²)	0.99			High K (dyn-sec/cm²)	0.88			
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.006	- Maintain Fluid Loss with: 1sx of MF pac over 1hr, and one aquastar over one hour, we need to maintain fluid loss 8-10 ml/30min.								
Solids (V/frac)	0.042									
M.B.T. (kg/m³)	2.1	- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).								
Alkalinity (pF/mF)	2.00/2.40									
Chlorides (mg/L)	5,500	- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.								
Calcium (mg/L)	40									
pHpA (Kg/m3)	0.0	- Maintain viscosity @ 50-52 S/L with additions of MF Vis, mix in hopper slowly (1hr) so you dont blind the shaker screens. (1 circulation recommended per sx)								
Carbonate (mg/L)	480.00									
Hydroxyl (mg/L)	544.00	- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.								
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	1,700,000	-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>								

Product	Units	Qty.
mf pac	22.7 KG	2
Caustic Soda	22.7 KG	6
Kelzan XCD	25.0 KG	8
Starch	50.0 LB	2
T-352	20.0 L	1
Corinox	20.0 L	1
Engineering	1.0 EA	1

Well History

Drilled from 1985m to 2016m, no proplems reported. Hole drag 45up/11down and torque on bottom 4800 Last survey 42deg..

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$51,903.88
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	$4,885.05
Location	Edson				Cumulative	$56,788.93

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Water Based Report

Printed: 11/14/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/13/2009 | Report: 31 of 32
Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54
Operator: Petrolia | Well Name: Petrolia | Prov: AB
Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 21
Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	11	Drill String				Casing				Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	R34ADH	DC	167.0	59.0	164.0	Surface	244.5	224.4	212	Annulus (m³)	55.7
Depth In (m)	1,174	HWDP	102.0	68.0	93.0					String Cap (m³)	8.2
Jets (mm)	0.0 0.0 0.0	DP	102.0	73.0	1,782.0					Hole (m³)	63.9
	12.7 12.7 12.7									Tanks (m³)	58.0
Hours	12.0									Ttl Active (m³)	121.9
ROP (m/hr)	72.1	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	51.9		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			1.18
Bit HHP (KW)	30.9	Pump 1	140.0	254.0	0.0112	106	1.18				
Jet Impact (N)	1,069.0	Pump 2	140.0	254.0	0.0112	0	0.00	Circ. Pres. (Kpa)			9,160

Properties	06:02 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	2,039	D.P. + Open	42.0	Surf. to Bit	7.0	Dev.	Depth	Az.	Surf.	1.3
T.V. Depth (m)	0.00	D.P. + Casing	37.7	Hole Circ.	54.0	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,060	D.C. #1	82.1	Bottoms Up	47.1	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.40	D.C. #2		Total Active	103.1				Dilution (L/min)	

Temp (°C)	29	Solids Calculations			Solids Equipment			
Vis (sec/L)	48	H. Grav.	0.0 kg/m³	0.0 %		Type	Screens	
600/300	39/28	L. Grav.	98.8 kg/m³	3.7 %	Shaker	derreck	175 140	140
200/100	23/17	Drill Sol.	111.2 kg/m³	4.2 %	Shaker	derrick	175 140	140
6/3	5/4	Av. Dens.	2,650 kg/m³			U.F. (kg/m³)	O.F.. (kg/m³)	L/min
P.V. (mPa-sec)	11.0	Oil / Water	0.0 /	96.2	Centrif	1,540	1,050	
Y.P. (Pa)	8.5	E.C.D.	1,064 kg/m³		Centrif	1,570	1,050	
Gels (10sec/10min)	2.0/4.0	Materials req. for 10 kg/m³ increase		Barite (sacks)	40.7	Cal.Carb. (sacks)		80.8
pH	10.5	Low n (slope)	0.42	High n (slope)	0.48			
Filtrate (cc/30)	9.5	Low K (dyn-sec/cm²)	1.10	High K (dyn-sec/cm²)	0.75			
Cake (mm)	1.0							

Sand (V/frac)	0.005
Solids (V/frac)	0.038
M.B.T. (kg/m³)	2.1
Alkalinity (pF/mF)	1.20/2.00
Chlorides (mg/L)	4,500
Calcium (mg/L)	60
pHpA (Kg/m3)	0.0
Carbonate (mg/L)	960.00
Hydroxyl (mg/L)	136.00
Bicarbonate (mg/L)	0.00
k+ (mg/L)	1,060.000

Product	Units	Qty.
mf pac	22.7 KG	1
Defoamer	20.0 L	1
Caustic Soda	22.7 KG	1
Starch	50.0 LB	1
Engineering	1.0 EA	1

Recommendations & Remarks

- Maintain Fluid Loss with: 1sx of MF pac over 1hr, and one aquastar over one hour, we need to maintain fluid loss 8-10 ml/30min.

- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).

- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.

- Maintain viscosity @ 50-52 S/L with additions of MF Vis, mix in hopper slowly (1hr) so you dont blind the shaker screens. (1 circulation recommended per sx)

- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.

-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Well History

Drilled from 2016m to 2039m, no proplems reported. Hole drag 90up/40down and torque on bottom 4500 Last survey @ 2003 was 38deg.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$56,788.93
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	$1,379.32
Location	Edson				Cumulative	$58,168.25

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Water Based Report

Alliance Drilling Fluids Ltd.

Printed: 11/13/2009
Version: ADF - 3.0

Report Date: 11/13/2009 | Report: 32 of 32

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 21

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	11	Drill String				Casing				Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	R34ADH	DC	167.0	59.0	164.0	Surface	244.5	224.4	212	Annulus (m³)	56.6
Depth In (m)	1,174	HWDP	102.0	68.0	93.0					String Cap (m³)	8.4
Jets (mm)	0.0 0.0 0.0	DP	102.0	73.0	1,813.0					Hole (m³)	64.9
	12.7 12.7 12.7									Tanks (m³)	55.7
Hours	12.0									Ttl Active (m³)	120.6
ROP (m/hr)	74.7	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	59.2		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)		1.35	
Bit HHP (KW)	45.5	Pump 1	140.0	254.0	0.0112	121	1.35				
Jet Impact (N)	1,379.8	Pump 2	140.0	254.0	0.0112	0	0.00	Circ. Pres. (Kpa)		10,300	

Properties	16:29 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	2,070	D.P. + Open	48.0	Surf. to Bit	6.2	Dev.	Depth	Az.	Surf.	1.3
T.V. Depth (m)	0.00	D.P. + Casing	43.0	Hole Circ.	48.1	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,050	D.C. #1	93.8	Bottoms Up	41.9	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.30	D.C. #2		Total Active	89.3				Dilution (L/min)	
Temp (°C)	32	Solids Calculations				Solids Equipment				
Vis (sec/L)	51	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	39/28	L. Grav.	83.2 kg/m³		3.1 %	Shaker	derreck	175	140	140
200/100	23/17	Drill Sol.	93.2 kg/m³		3.5 %	Shaker	derrick	175	140	140
6/3	6/5	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	11.0	Oil / Water	0.0 /		96.8	Centrif	1,540	1,045		
Y.P. (Pa)	8.5	E.C.D.	1,054 kg/m³			Centrif	1,570	1,045		
Gels (10sec/10min)	4.0/6.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	40.2	Cal.Carb. (sacks)			79.4
pH	10.0	Low n (slope)	0.37		High n (slope)	0.48				
Filtrate (cc/30)	9.0	Low K (dyn-sec/cm²)	1.43		High K (dyn-sec/cm²)	0.75				
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.005	- Maintain Fluid Loss with: 1sx of MF pac over 1hr and half (1 circ), we need to maintain fluid loss 8-10 ml/30min.								
Solids (V/frac)	0.032	- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).								
M.B.T. (kg/m³)	2.1									
Alkalinity (pF/mF)	1.00/1.70	- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.								
Chlorides (mg/L)	4,700									
Calcium (mg/L)	60	- Maintain viscosity @ 50-52 S/L with additions of MF Vis, mix in hopper slowly (1hr and half) so you dont blind the shaker screens. (1 circulation recommended per sx)								
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	840.00	- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.								
Hydroxyl (mg/L)	102.00									
Bicarbonate (mg/L)	0.00	-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>								
k+ (mg/L)	1,000.000									

Product	Units	Qty.

Well History

Drilled from 2039m to 2070m, no proplems reported. Hole drag 30up/15down and torque on bottom 4500 Last survey @ 2032 was 37deg.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$58,168.25
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	
Location	Edson				Cumulative	$58,168.25

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Water Based Report

Printed: 11/14/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/14/2009 | Report: 33 of 33
Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54
Operator: Petrolia | Well Name: Petrolia | Prov: AB
Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 22
Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	11	Drill String				Casing				Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	R34ADH	DC	167.0	59.0	164.0	Surface	244.5	224.4	212	Annulus (m³)	57.5
Depth In (m)	1,174	HWDP	102.0	68.0	93.0					String Cap (m³)	8.5
Jets (mm)	0.0 0.0 0.0	DP	102.0	73.0	1,845.0					Hole (m³)	66.0
	12.7 12.7 12.7									Tanks (m³)	54.3
Hours	12.0									Ttl Active (m³)	120.3
ROP (m/hr)	77.3	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	57.8		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			1.32
Bit HHP (KW)	42.6	Pump 1	140.0	254.0	0.0112	118	1.32				
Jet Impact (N)	1,324.7	Pump 2	140.0	254.0	0.0112	0	0.00	Circ. Pres. (Kpa)			9,300

Properties	05:49 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	2,102	D.P. + Open	41.3	Surf. to Bit	6.5	Dev.	Depth	Az.	Surf.	0.5
T.V. Depth (m)	0.00	D.P. + Casing	42.0	Hole Circ.	50.1	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,060	D.C. #1	72.7	Bottoms Up	43.6	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.40	D.C. #2		Total Active	91.3				Dilution (L/min)	

		Solids Calculations				Solids Equipment				
Temp (°C)	32									
Vis (sec/L)	50	H. Grav.	0.0 kg/m³	0.0 %			Type	Screens		
600/300	39/28	L. Grav.	98.8 kg/m³	3.7 %		Shaker	derreck	175	140	140
200/100	24/18	Drill Sol.	111.2 kg/m³	4.2 %		Shaker	derrick	175	140	140
6/3	7/6	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	11.0	Oil / Water	0.0 /	96.2		Centrif	1,650	1,050		
Y.P. (Pa)	8.5	E.C.D.	1,064 kg/m³			Centrif	1,680	1,050		
Gels (10sec/10min)		Materials req. for 10 kg/m³ increase		Barite (sacks)	40.2	Cal.Carb. (sacks)				79.7
pH	10.5	Low n (slope)	0.33	High n (slope)	0.48					
Filtrate (cc/30)	9.0	Low K (dyn-sec/cm²)	1.79	High K (dyn-sec/cm²)	0.75					
Cake (mm)	1.0									
Sand (V/frac)	0.004									
Solids (V/frac)	0.038									
M.B.T. (kg/m³)	2.1									
Alkalinity (pF/mF)	1.60/2.00									
Chlorides (mg/L)	5,000									
Calcium (mg/L)	40									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	480.00									
Hydroxyl (mg/L)	408.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	930.000									

Product	Units	Qty.
mf pac	22.7 KG	3
Caustic Soda	22.7 KG	3
Kelzan XCD	25.0 KG	2
Starch	50.0 LB	2
Zetag 7692	25.0 KG	3
Corinox	20.0 L	1
Engineering	1.0 EA	1

Recommendations & Remarks

- Maintain Fluid Loss with: 1sx of MF pac over 1hr and half (1 circ), we need to maintain fluid loss 8-10 ml/30min.
- Maintain Mud Density below 1080 KG/M3 with solids control and or (fresh water if nessesary).
- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.
- Maintain viscosity @ 50-52 S/L with additions of MF Vis, mix in hopper slowly (1hr and half) so you dont blind the shaker screens. (1 circulation recommended per sx)
- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.

-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Well History

Drilled from 2070m to 2102m, no proplems reported. Hole drag 90up/40dowm and torque on bottom 5000 Last survey @ 2032 was 37deg.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$61,028.42
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	$3,484.68
Location	Edson				Cumulative	$64,513.10

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Water Based Report

Printed: 11/16/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/14/2009 | Report: 34 of 36

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 22

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #			12	Drill String				Casing				Mud Volumes	
Size (mm)			215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type			R34ADH	DC	167.0	59.0	164.0	Surface	244.5	224.4	212	Annulus (m³)	59.7
Depth In (m)			1,174	HWDP	102.0	68.0	93.0					String Cap (m³)	8.8
Jets (mm)	0.0	0.0	0.0	DP	102.0	73.0	1,923.0					Hole (m³)	68.5
	12.7	12.7	12.7									Tanks (m³)	52.7
Hours			12.0									Ttl Active (m³)	121.2
ROP (m/hr)			83.8	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)			57.8		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			1.32
Bit HHP (KW)			42.6	Pump 1	140.0	254.0	0.0112	118	1.32				
Jet Impact (N)			1,324.7	Pump 2	140.0	254.0	0.0112	0	0.00	Circ. Pres. (Kpa)			10,150

Properties	17:40 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	2,180	D.P. + Open	46.8	Surf. to Bit	6.7	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	0.00	D.P. + Casing	42.0	Hole Circ.	52.0	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,060	D.C. #1	91.4	Bottoms Up	45.3	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.40	D.C. #2		Total Active	92.0				Dilution (L/min)	

		Solids Calculations				Solids Equipment				
Temp (°C)	32						Type	Screens		
Vis (sec/L)	50	H. Grav.	0.0 kg/m³	0.0 %						
600/300	40/29	L. Grav.	98.8 kg/m³	3.7 %		Shaker	derreck	175	140	140
200/100	25/21	Drill Sol.	111.2 kg/m³	4.2 %		Shaker	derrick	175	140	140
6/3	7/6	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	11.0	Oil / Water	0.0 /	96.2		Centrif	1,650	1,050		
Y.P. (Pa)	9.0	E.C.D.	1,065 kg/m³			Centrif	1,680	1,050		
Gels (10sec/10min)	3.0/6.0	Materials req. for 10 kg/m³ increase		Barite (sacks)	40.5	Cal.Carb. (sacks)		80.3		
pH	10.0	Low n (slope)	0.34	High n (slope)	0.46					
Filtrate (cc/30)	9.0	Low K (dyn-sec/cm²)	1.85	High K (dyn-sec/cm²)	0.82					
Cake (mm)	1.0									
Sand (V/frac)	0.005									
Solids (V/frac)	0.038									
M.B.T. (kg/m³)	2.1									
Alkalinity (pF/mF)	1.20/1.70									
Chlorides (mg/L)	5,000									
Calcium (mg/L)	40									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	600.00									
Hydroxyl (mg/L)	238.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	930,000									

Product	Units	Qty.

Recommendations & Remarks

- Maintain Fluid Loss with: 1sx of MF pac over 1hr and half (1 circ), we need to maintain fluid loss 8-10 ml/30min.

- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.

- Maintain viscosity @ 50-52 S/L with additions of MF Vis, mix in hopper slowly (1hr and half) so you dont blind the shaker screens. (1 circulation recommended per sx)

- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.

-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Well History

Drilled from 2102m to 2131m, no proplems reported. Hole drag 30up/15down and torque on bottom 5100 Last survey @ 2080m was 37deg.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$64,513.10
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	
Location	Edson				Cumulative	$64,513.10

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Water Based Report

Printed: 11/16/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/15/2009 | Report: 35 of 36
Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54
Operator: Petrolia | Well Name: Petrolia | Prov: AB
Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 23
Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	12	Drill String				Casing				Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	R34ADH	DC	167.0	59.0	164.0	Surface	244.5	224.4	212	Annulus (m³)	59.1
Depth In (m)	1,174	HWDP	102.0	68.0	93.0					String Cap (m³)	8.8
Jets (mm)	0.0 0.0 0.0	DP	102.0	73.0	1,903.0					Hole (m³)	67.8
	12.7 12.7 12.7									Tanks (m³)	44.1
Hours	12.0									Ttl Active (m³)	111.9
ROP (m/hr)	82.2	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	75.0		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			1.71
Bit HHP (KW)	95.0	Pump 1	152.0	254.0	0.0132	130	1.71				
Jet Impact (N)	2,276.3	Pump 2	140.0	254.0	0.0112	0	0.00	Circ. Pres. (Kpa)			14,480

Properties	20:37 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	2,160	D.P. + Open	60.8	Surf. to Bit	5.1	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	0.00	D.P. + Casing	54.5	Hole Circ.	39.7	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,080	D.C. #1	118.7	Bottoms Up	34.6	20.90	1,102	315.8	Dumped	9.3
Mud Grad. (kPa/m)	10.59	D.C. #2		Total Active	65.5				Dilution (L/min)	
Temp (°C)	26	Solids Calculations				Solids Equipment				
Vis (sec/L)	43	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	32/24	L. Grav.	132.6 kg/m³		5.0 %	Shaker	derreck	175	140	140
200/100	20/15	Drill Sol.	150.4 kg/m³		5.7 %	Shaker	derrick	175	140	140
6/3	5/4	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	8.0	Oil / Water	0.0 /		94.9	Centrif				
Y.P. (Pa)	8.0	E.C.D.	1,084 kg/m³			Centrif				
Gels (10sec/10min)	3.0/5.0	Materials req. for 10 kg/m³ increase		Barite (sacks)	37.6	Cal.Carb. (sacks)				75.1
pH	10.0	Low n (slope)	0.39	High n (slope)	0.41					
Filtrate (cc/30)	11.0	Low K (dyn-sec/cm²)	1.11	High K (dyn-sec/cm²)	0.94					
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.005	- Tonite mix 80sxs of Potasium Chloride 5min/sx minimum, into hopper.								
Solids (V/frac)	0.051									
M.B.T. (kg/m³)	1.8	- Maintain Fluid Loss with: 1sx of MF pac over 1circulation and 2sxs of lignite, we need to maintain fluid loss 8-10 ml/30min.								
Alkalinity (pF/mF)	1.10/2.10									
Chlorides (mg/L)	13,500	- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.								
Calcium (mg/L)	60									
pHpA (Kg/m3)	0.0	- Maintain viscosity @ 50-52 S/L with additions of MF Vis, mix in hopper slowly (over one circulation) so you dont blind the shaker screens.								
Carbonate (mg/L)	1,200.00									
Hydroxyl (mg/L)	34.00	- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.								
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	14,800.000	-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>								

Product	Units	Qty.
Caustic Soda	22.7 KG	2
Engineering	1.0 EA	1

Well History

Drilled from 2131m to 2160m, no proplems reported. Hole drag 45up/15dowm and torque on bottom 4500 Last survey @ 2080m was 37deg. Displaced active system to kcl mud from previous well.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$64,513.10
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	$1,020.00
Location	Edson				Cumulative	$65,533.10

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Water Based Report

Alliance Drilling Fluids Ltd.

Printed: 11/16/2009
Version: ADF - 3.0

Report Date: 11/16/2009 | Report: 36 of 36

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 24

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	12	Drill String				Casing				Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	R34ADH	DC	167.0	59.0	164.0	Surface	244.5	224.4	212	Annulus (m³)	59.7
Depth In (m)	1,174	HWDP	102.0	68.0	93.0					String Cap (m³)	8.8
Jets (mm)	0.0 0.0 0.0	DP	102.0	73.0	1,925.0					Hole (m³)	68.6
	12.7 12.7 12.7									Tanks (m³)	44.1
Hours	21.0									Ttl Active (m³)	112.7
ROP (m/hr)	48.0	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	75.0		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)		1.71	
Bit HHP (KW)	95.5	Pump 1	152.0	254.0	0.0132	130	1.71				
Jet Impact (N)	2,286.8	Pump 2	140.0	254.0	0.0112	0	0.00	Circ. Pres. (Kpa)		12,600	

Properties	06:26 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	2,182	D.P. + Open	60.8	Surf. to Bit	5.2	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	0.00	D.P. + Casing	54.5	Hole Circ.	40.1	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,085	D.C. #1	118.7	Bottoms Up	34.9	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.64	D.C. #2		Total Active	65.9				Dilution (L/min)	

		Solids Calculations				Solids Equipment				
Temp (°C)	26						Type	Screens		
Vis (sec/L)	48	H. Grav.	0.0 kg/m³	0.0 %						
600/300	40/29	L. Grav.	140.4 kg/m³	5.3 %		Shaker	derreck	175	140	140
200/100	25/19	Drill Sol.	159.0 kg/m³	6.0 %		Shaker	derrick	175	140	140
6/3	7/6	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	11.0	Oil / Water	0.0 /	94.6		Centrif				
Y.P. (Pa)	9.0	E.C.D.	1,090 kg/m³			Centrif				
Gels (10sec/10min)	4.0/7.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	37.9	Cal.Carb. (sacks)			75.8
pH	10.5	Low n (slope)	0.34		High n (slope)	0.46				
Filtrate (cc/30)	9.0	Low K (dyn-sec/cm²)	1.85		High K (dyn-sec/cm²)	0.82				
Cake (mm)	1.0									
Sand (V/frac)	0.006									
Solids (V/frac)	0.054									
M.B.T. (kg/m³)	2.1									
Alkalinity (pF/mF)	1.60/3.00									
Chlorides (mg/L)	17,000									
Calcium (mg/L)	60									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	1,680.00									
Hydroxyl (mg/L)	68.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	17,800.000									

Recommendations & Remarks

- mix now: 120sxs of Potasium Chloride 5min/sx minimum, into hopper.

- Maintain Fluid Loss with: 1sx of MF pac over 1circulation and 2sxs of lignite, we need to maintain fluid loss 8-10 ml/30min.

- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.

- Maintain viscosity @ 50-52 S/L with additions of MF Vis, mix in hopper slowly (over one circulation) so you dont blind the shaker screens.

- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.

-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Product	Units	Qty.
Engineering	1.0 EA	1

Well History

Drilled from 2160m to 2185m, no proplems reported. Hole drag 35up/20down and torque on bottom 3700 Last survey @ 2080m was 37deg. Displaced active system to kcl mud from previous well

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$65,533.10
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	$900.00
Location	Edson				Cumulative	$66,433.10

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Water Based Report

Printed: 11/16/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/16/2009 | Report: 37 of 37

Spud: 10/23/2009 | Activity: Circulate and Condition | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 24

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	12	Drill String				Casing				Mud Volumes	
Size (mm)	215.0		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	R34ADH	DC	167.0	59.0	164.0	Surface	244.5	224.4	212	Annulus (m³)	60.2
Depth In (m)	1,174	HWDP	102.0	68.0	93.0					String Cap (m³)	8.9
Jets (mm)	0.0 0.0 0.0	DP	102.0	73.0	1,943.0					Hole (m³)	69.1
	12.7 12.7 12.7									Tanks (m³)	48.3
Hours	21.0									Ttl Active (m³)	117.4
ROP (m/hr)	48.9	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	75.0		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)		1.71	
Bit HHP (KW)	97.7	Pump 1	152.0	254.0	0.0132	130	1.71				
Jet Impact (N)	2,339.5	Pump 2	140.0	254.0	0.0112	0	0.00	Circ. Pres. (Kpa)		13,200	

Properties	20:23 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	2,200	D.P. + Open	60.8	Surf. to Bit	5.2	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	0.00	D.P. + Casing	54.5	Hole Circ.	40.4	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,110	D.C. #1	118.7	Bottoms Up	35.2	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.89	D.C. #2		Total Active	68.7				Dilution (L/min)	
Temp (°C)	34	Solids Calculations				Solids Equipment				
Vis (sec/L)	58	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	54/42	L. Grav.	182.0 kg/m³		6.9 %	Shaker	derreck	175	140	140
200/100	35/27	Drill Sol.	206.8 kg/m³		7.8 %	Shaker	derrick	175	140	140
6/3	12/10	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	12.0	Oil / Water	0.0 /		93.0	Centrif				
Y.P. (Pa)	15.0	E.C.D.	1,118 kg/m³			Centrif				
Gels (10sec/10min)	6.0/8.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	39.9	Cal.Carb. (sacks)			80.3
pH	10.5	Low n (slope)	0.31		High n (slope)	0.36				
Filtrate (cc/30)	8.5	Low K (dyn-sec/cm²)	3.58		High K (dyn-sec/cm²)	2.38				
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.007	-Mud looks good for logging, no chml needed.								
Solids (V/frac)	0.070									
M.B.T. (kg/m³)	2.1									
Alkalinity (pF/mF)	1.50/2.70									
Chlorides (mg/L)	29,000									
Calcium (mg/L)	40									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	1,440.00									
Hydroxyl (mg/L)	102.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	32,300.000									
KCL (mg/L)	61,300.000									

Product	Units	Qty.

Well History

Drilled from 2185m to TD @ 2200m, no proplems reported. Hole drag 35up/20down, Last survey @ 2177m was 34deg.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$66,433.10
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	
Location	Edson				Cumulative	$66,433.10

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Water Based Report

Printed: 11/27/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/27/2009 | Report: 40 of 40
Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54
Operator: Petrolia | Well Name: Petrolia | Prov: AB
Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 35
Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	14	Drill String				Casing				Mud Volumes	
Size (mm)	152.4		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	r30apdh	DC	133.0	72.0	18.0	Surface	244.5	224.4	212	Annulus (m³)	26.1
Depth In (m)	1,171	HWDP	102.0	68.0	374.0	Intermed	177.8	159.5	2,199	String Cap (m³)	9.1
Jets (mm)	0.0 0.0 0.0	DP	102.0	73.0	1,828.0					Hole (m³)	35.2
	15.9 15.9 15.9									Tanks (m³)	40.0
Hours	8.5									Ttl Active (m³)	75.2
ROP (m/hr)	123.4	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	25.9		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			0.93
Bit HHP (KW)	6.1	Pump 1	152.0	254.0	0.0132						
Jet Impact (N)	422.1	Pump 2	140.0	254.0	0.0112	83	0.93	Circ. Pres. (Kpa)			10,200

Properties	06:03 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	2,220	D.P. + Open	92.9	Surf. to Bit	9.8	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	2,008.00	D.P. + Casing	78.4	Hole Circ.	37.9	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,070	D.C. #1	217.8	Bottoms Up	28.1	20.90	1,102	315.8	Dumped	47.3
Mud Grad. (kPa/m)	10.50	D.C. #2		Total Active	81.1				Dilution (L/min)	
Temp (°C)	21	Solids Calculations				Solids Equipment				
Vis (sec/L)	60	H. Grav.	0.0 kg/m³		0.0 %		Type		Screens	
600/300	59/37	L. Grav.	117.0 kg/m³		4.4 %	Shaker	derreck	175	140	140
200/100	28/17	Drill Sol.	132.5 kg/m³		5.0 %	Shaker	derrick	175	140	140
6/3	3/2	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	22.0	Oil / Water	0.0 /		95.5	Centrif				
Y.P. (Pa)	7.5	E.C.D.	1,088 kg/m³			Centrif				
Gels (10sec/10min)	2.0/4.0	Materials req. for 10 kg/m³ increase				Barite (sacks)	25.2	Cal.Carb. (sacks)		50.1
pH	11.5	Low n (slope)	0.63			High n (slope)	0.67			
Filtrate (cc/30)	14.0	Low K (dyn-sec/cm²)	0.36			High K (dyn-sec/cm²)	0.29			
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.006									
Solids (V/frac)	0.045	- Maintain viscosity to 50-55 S/L with MF vis, Mix over 1 circulation as needed.								
M.B.T. (kg/m³)	1.8	- Maintain Fluid Loss with: 1sx of MF pac and 1 sx of lignite , Mix over 1circulation, we need to maintain fluid loss 8-10 ml/30min.								
Alkalinity (pF/mF)	2.40/1.50									
Chlorides (mg/L)	24,000									
Calcium (mg/L)	20	- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.								
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	-1,080.00	- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.								
Hydroxyl (mg/L)	1,122.00	-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>								
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	26,600.000									
KCL (mg/L)	50,600.000									

Product	Units	Qty.
Engineering	1.0 EA	1

Well History

Drilled out from 2200m to 2220m, no proplems reported. Hole drag 30up/11dowm, Last survey @ 2177m was 34deg.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$95,836.74
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	$900.00
Location	Edson				Cumulative	$96,736.74

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Oil Based Report

Printed: 11/28/2009
Version: ADF - 4.0

Alliance Drilling Fluids Ltd.

Report Date: 11/28/2009 | Report: 42 of 42

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 36

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	15	Drill String				Casing				Mud Volumes	
Size (mm)	152.4		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	ms1613	DC	133.0	72.0	18.0	Surface	244.5	224.4	212	Annulus (m³)	26.8
Depth In (m)	1,171	HWD	102.0	68.0	374.0	Interme	177.8	159.5	2,199	String Cap (m³)	9.4
Jets (mm)	0.0 0.0 0.0	DP	102.0	73.0	1,905.0					Hole (m³)	36.3
	10.3 10.3 10.3									Tanks (m³)	65.6
Hours	2.0									Ttl Active (m³)	101.9
ROP (m/hr)	563.0	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	61.8		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			0.93
Bit HHP (KW)	34.3	Pump 1	152.0	254.0	0.0132						
Jet Impact (N)	996.4	Pump 2	140.0	254.0	0.0112	83	0.93	Circ. Pres. (Kpa)			11,000

Properties	10:09 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	2,297	D.P. + Open	92.9	Surf. to Bit	10.2	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	0.00	D.P. + Casing	78.4	Hole Circ.	39.1	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,060	D.C. #1	217.8	Bottoms Up	29.0	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.40	D.C. #2		Total Active	109.9				Total	
Temp (°C)	25	Solids Calculations				Solids Equipment				
Vis (sec/L)	50	H. Grav.	0.0 kg/m³	0.0 %			Type	Screens		
600/300	53/33	L. Grav.	98.8 kg/m³	3.7 %		Shaker	derreck	175	140	140
200/100	25/15					Shaker	derrick	175	140	140
6/3	2/1	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	20.0	Oil / Water	0.0 /	96.2		Centrif	1,730	1,060		
Y.P. (Pa)	6.5	E.C.D.	1,075 kg/m³			Centrif	1,715	1,060		
Gels (10/10 Pa)	2.0/3.0	Materials req. for 10 kg/m³ increase		Barite (sacks)	34	Cal.Carb. (sacks)			67	
HTHP (cc/30)		Base Oil Density (kg/m³)		Low n (slope)	0.76	High n (slope)			0.68	
HTHP (°C)				Low K (dyn-sec/cm²)	0.15	High K (dyn-sec/cm²)			0.24	
Cake (mm)	1.0									
Sand (V/frac)	0.0060									
Corr. Solids (V/frac)	0.0287									
Chl -Wh.Mud (mg/L)	19,500									
Calcium (mg/L)	40									
Excess Lime (kg/m³)										
E.S. (volts)										
Salinity (%)	3.1									
Activity (V/frac)	1.016									
Oil:Water (ratio)	0.0 / 100.0									
Water Ph Chl (mg/L)	20,139									
k+ (mg/L)	21,700.000									
KCL (mg/L)	41,200.000									

Product	Units	Qty.
mf vis	25.0 KG	3
mf pac	22.7 KG	5
Bicarbonate Of	50.0 LB	3
Lignite	50.0 LB	5
Sulphamic Acid	25.0 KG	5
Soda Ash	25.0 KG	4
Corinox	20.0 L	3
Engineering	1.0 EA	1

Recommendations & Remarks

- Today add 2pails of corinox, mix over 12hrs slowly on top of mud tanks.

- Maintain viscosity to 50-55 S/L with MF vis, Mix over 1 circulation as needed.

- Maintain Fluid Loss with: 1sx of MF pac, Mix over 1circulation, we need to maintain fluid loss 8-10 ml/30min.

- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.

- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.

-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Well History

Drilled out from 2267m to 2297m, no proplems reported. P.O.O.H to change bit. Hole drag 30up/10down, Last survey @ 2252m was 36.5deg.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$101,212.26
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	$3,834.39
Location	Edson				Cumulative	$105,046.65

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Water Based Report

Printed: 12/1/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 11/30/2009 | Report: 43 of 44

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 38

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	16	Drill String				Casing				Mud Volumes	
Size (mm)	152.4		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	dsr908d-b1	DC	133.0	72.0	18.0	Surface	244.5	224.4	212	Annulus (m³)	27.2
Depth In (m)	1,171	HWDP	102.0	68.0	374.0	Intermed	177.8	159.5	2,199	String Cap (m³)	9.5
Jets (mm)	0.0 0.0 0.0	DP	102.0	73.0	1,938.0					Hole (m³)	36.7
	12.7 12.7 12.7									Tanks (m³)	33.0
Hours	2.0									Ttl Active (m³)	69.7
ROP (m/hr)	579.5	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	42.3		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)		0.96	
Bit HHP (KW)	16.7	Pump 1	152.0	254.0	0.0132						
Jet Impact (N)	710.3	Pump 2	127.0	254.0	0.0092	105	0.96	Circ. Pres. (Kpa)		13,100	

Properties	06:03 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	2,330	D.P. + Open	96.7	Surf. to Bit	9.9	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	0.00	D.P. + Casing	81.7	Hole Circ.	38.1	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,060	D.C. #1	226.7	Bottoms Up	28.2	20.90	1,102	315.8	Dumped	14.7
Mud Grad. (kPa/m)	10.40	D.C. #2		Total Active	72.3				Dilution (L/min)	
Temp (°C)	21	Solids Calculations				Solids Equipment				
Vis (sec/L)	55	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	59/38	L. Grav.	98.8 kg/m³		3.7 %	Shaker	derreck	175	140	140
200/100	30/19	Drill Sol.	111.2 kg/m³		4.2 %	Shaker	derrick	175	140	140
6/3	3/2	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	21.0	Oil / Water	0.0 /		96.2	Centrif	1,730	1,060		
Y.P. (Pa)	8.5	E.C.D.	1,077 kg/m³			Centrif	1,715	1,060		
Gels (10sec/10min)	2.0/3.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	23.3	Cal.Carb. (sacks)			46.2
pH	11.0	Low n (slope)	0.64		High n (slope)	0.63				
Filtrate (cc/30)	10.0	Low K (dyn-sec/cm²)	0.37		High K (dyn-sec/cm²)	0.37				
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.004									
Solids (V/frac)	0.038									
M.B.T. (kg/m³)	2.1									
Alkalinity (pF/mF)	1.30/1.60									
Chlorides (mg/L)	20,000									
Calcium (mg/L)	40									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	360.00									
Hydroxyl (mg/L)	340.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	21,700.000									
KCL (mg/L)	41,200.000									

- Today add 2pails of corinox, mix over 12hrs slowly on top of mud tanks.
- Maintain viscosity to 50-55 S/L with MF vis, Mix over 1 circulation as needed.
- Maintain Fluid Loss with: 1sx of MF pac, Mix over 1circulation, we need to maintain fluid loss 8-10 ml/30min.
- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation.
- Add 1 pail of corinox daily (24hrs) on top of mud tanks, as slow as you can, through out the day.
- -<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Product	Units	Qty.
Engineering	1.0 EA	1

Well History

Drilled out from 2297m to 2230m, no proplems reported. P.O.O.H to change bit. Hole drag 30up/12down, Last survey @ 2252m was 36.5deg.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$105,046.65
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	$900.00
Location	Edson				Cumulative	$105,946.65

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Water Based Report

Printed: 12/1/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 12/1/2009 | Report: 44 of 44

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 39

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	16	Drill String				Casing				Mud Volumes	
Size (mm)	152.4		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type	dsr908d-b1	DC	133.0	72.0	18.0	Surface	244.5	224.4	212	Annulus (m³)	27.8
Depth In (m)	1,171	HWDP	102.0	68.0	374.0	Intermed	177.8	159.5	2,199	String Cap (m³)	9.8
Jets (mm)	0.0 0.0 0.0	DP	102.0	73.0	1,995.0					Hole (m³)	37.5
	12.7 12.7 12.7									Tanks (m³)	37.0
Hours	7.0									Ttl Active (m³)	74.5
ROP (m/hr)	173.7	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	42.3		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)		0.96	
Bit HHP (KW)	16.7	Pump 1	152.0	254.0	0.0132						
Jet Impact (N)	710.3	Pump 2	127.0	254.0	0.0092	105	0.96	Circ. Pres. (Kpa)		10,500	

Properties	06:07 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	2,387	D.P. + Open	96.7	Surf. to Bit	10.1	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	0.00	D.P. + Casing	81.7	Hole Circ.	38.9	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,060	D.C. #1	226.7	Bottoms Up	28.8	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.40	D.C. #2		Total Active	77.3				Dilution (L/min)	

		Solids Calculations				Solids Equipment				
Temp (°C)	26						Type	Screens		
Vis (sec/L)	52	H. Grav.	0.0 kg/m³	0.0 %						
600/300	58/40	L. Grav.	98.8 kg/m³	3.7 %		Shaker	derreck	175	140	140
200/100	33/23	Drill Sol.	111.2 kg/m³	4.2 %		Shaker	derrick	175	140	140
6/3	5/4	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	18.0	Oil / Water	0.0 /	96.2		Centrif	1,730	1,050		
Y.P. (Pa)	11.0	E.C.D.	1,078 kg/m³			Centrif	1,715	1,050		
Gels (10sec/10min)	3.0/4.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	24.9	Cal.Carb. (sacks)			49.4
pH	11.0	Low n (slope)	0.50		High n (slope)	0.54				
Filtrate (cc/30)	9.5	Low K (dyn-sec/cm²)	0.93		High K (dyn-sec/cm²)	0.73				
Cake (mm)	1.0									
Sand (V/frac)	0.005									
Solids (V/frac)	0.038									
M.B.T. (kg/m³)	2.1									
Alkalinity (pF/mF)	1.20/1.60									
Chlorides (mg/L)	19,500									
Calcium (mg/L)	40									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	480.00									
Hydroxyl (mg/L)	272.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	20,900.000									
KCL (mg/L)	40,400.000									

Product	Units	Qty.
Corinox	20.0 L	2
Engineering	1.0 EA	1

Recommendations & Remarks

- Today add 1 pail of corinox, mix over 12hrs slowly on top of mud tanks.
- Maintain viscosity to 50-55 S/L with MF vis, Mix over 1 circulation as needed.
- Maintain Fluid Loss with: 1sx of MF pac, Mix over 1circulation, we need to maintain fluid loss 8-10 ml/30min.
- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation

-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Well History

Drilled from 2230m to 2287m, no proplems reported. P.O.O.H to change bit. Hole drag 30up/12down.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$105,946.65
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	$1,189.66
Location	Edson				Cumulative	$107,136.31

The recommendation hereon shall not be construed as authorizing the infringement of any valid patent and are made without assumption of any liability by its agents and are statements of opinions only. Prior to handling or mixing the products recommended in this report, the MSDS for those products must be consulted. In consideration of this report and oral suggestions, it is agreed that Alliance Drilling Fluids Ltd. shall not be liable for any damage resulting from the same and it is to be held harmless.

Water Based Report

Printed: 12/7/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 12/2/2009 | Report: 45 of 47

Spud: 10/23/2009 | Activity: Drill Ahead | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 40

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	17	Drill String				Casing				Mud Volumes	
Size (mm)	152.4		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type		DC	133.0	72.0	18.0	Surface	244.5	224.4	212	Annulus (m³)	28.2
Depth In (m)	1,171	HWDP	102.0	68.0	374.0	Intermed	177.8	159.5	2,199	String Cap (m³)	10.0
Jets (mm)	9.5 9.5 9.5	DP	102.0	73.0	2,041.0					Hole (m³)	38.2
	12.7 12.7 12.7									Tanks (m³)	45.0
Hours	7.0									Ttl Active (m³)	83.2
ROP (m/hr)	180.3	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	27.1		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			0.96
Bit HHP (KW)	6.9	Pump 1	152.0	254.0	0.0132						
Jet Impact (N)	459.7	Pump 2	127.0	254.0	0.0092	105	0.96	Circ. Pres. (Kpa)			11,500

Properties	06:08 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	2,433	D.P. + Open	96.7	Surf. to Bit	10.3	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	0.00	D.P. + Casing	81.7	Hole Circ.	39.6	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,070	D.C. #1	226.7	Bottoms Up	29.3	20.90	1,102	315.8	Dumped	
Mud Grad. (kPa/m)	10.50	D.C. #2		Total Active	86.3				Dilution (L/min)	

Temp (°C)	23	Solids Calculations				Solids Equipment				
Vis (sec/L)	52	H. Grav.	0.0 kg/m³	0.0 %			Type	Screens		
600/300	52/36	L. Grav.	117.0 kg/m³	4.4 %		Shaker	derreck	175	140	140
200/100	30/21	Drill Sol.	132.1 kg/m³	5.0 %		Shaker	derrick	175	140	140
6/3	5/4	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	16.0	Oil / Water	0.0 /	95.5		Centrif	1,730	1,060		
Y.P. (Pa)	10.0	E.C.D.	1,087 kg/m³			Centrif	1,715	1,060		
Gels (10sec/10min)	2.0/3.0	Materials req. for 10 kg/m³ increase			Barite (sacks)	27.9	Cal.Carb. (sacks)			55.5
pH	10.5	Low n (slope)	0.48		High n (slope)	0.53				
Filtrate (cc/30)	9.0	Low K (dyn-sec/cm²)	0.97		High K (dyn-sec/cm²)	0.68				
Cake (mm)	1.0									

Sand (V/frac)	0.007
Solids (V/frac)	0.045
M.B.T. (kg/m³)	2.1
Alkalinity (pF/mF)	1.20/1.50
Chlorides (mg/L)	19,000
Calcium (mg/L)	40
pHpA (Kg/m3)	0.0
Carbonate (mg/L)	360.00
Hydroxyl (mg/L)	306.00
Bicarbonate (mg/L)	0.00
k+ (mg/L)	20,300.000
KCL (mg/L)	39,300.000

Product	Units	Qty.
Corinox	20.0 L	2
Engineering	1.0 EA	1

Recommendations & Remarks

- Today add 1 pail of corinox, mix over 12hrs slowly on top of mud tanks.
- Maintain viscosity to 50-55 S/L with MF vis, Mix over 1 circulation as needed.
- Maintain Fluid Loss with: 1sx of MF pac, Mix over 1circulation, we need to maintain fluid loss 8-10 ml/30min.
- Maintain PH at 10- 10.5 with additions of Caustic Soda, mix in chemical bbl with water (full) (add water first) and slowly add to active over 2 circulation

-<MAKE SURE TO WEAR PROPER PPE WHEN MIXING CHMLS>

Well History

Drilled from 2387m to 2433m, no proplems reported. P.O.O.H to change bit. Hole drag 30up/12dowm. Last survey @ 2353 was 37deg.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$108,535.37
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	$1,189.66
Location	Edson				Cumulative	$109,725.03

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Water Based Report

Printed: 12/7/2009
Version: ADF - 3.0

Alliance Drilling Fluids Ltd.

Report Date: 12/4/2009 | Report: 46 of 47

Spud: 10/23/2009 | Activity: Circulate and Condition | LSD: 48 / 21 - 72 - 064 - 18 - W8 / 54

Operator: Petrolia | Well Name: Petrolia | Prov: AB

Rep. For: Marcel Yurchack (403) 852-8040 | Rig: Savanna 635 | Total Days: 42

Rep. For: | Rep. For: Gordon Pack 000-0000 | Mud Type: KCL Polymer

Bit #	17	Drill String				Casing				Mud Volumes	
Size (mm)	152.4		OD (mm)	ID (mm)	Length (m)		OD (mm)	ID (mm)	Set At (m)	Storage (m³)	
Type		DC	133.0	72.0	18.0	Surface	244.5	224.4	212	Annulus (m³)	28.2
Depth In (m)	1,171	HWDP	102.0	68.0	374.0	Interned	177.8	159.5	2,199	String Cap (m³)	10.0
Jets (mm)	9.5 9.5 9.5	DP	102.0	73.0	2,042.0					Hole (m³)	38.2
	12.7 12.7 12.7									Tanks (m³)	20.0
Hours	7.0									Ttl Active (m³)	58.2
ROP (m/hr)	180.4	Pump Data		F1000				F1000			
Noz. Vel. (m/sec)	37.0		Liner (mm)	Str (mm)	Disp/str (m³)	str/min	m³/min	Total Output (m³/min)			1.32
Bit HHP (KW)	17.6	Pump 1	152.0	254.0	0.0132						
Jet Impact (N)	853.4	Pump 2	140.0	254.0	0.0112	118	1.32	Circ. Pres. (Kpa)			13,300

Properties	23:46 Flowline	Ann. Vel. (m/min)		Circ Data (min)		Surveys			Losses (m³)	
Depth (m)	2,434	D.P. + Open	132.0	Surf. to Bit	7.6	Dev.	Depth	Az.	Surf.	
T.V. Depth (m)	0.00	D.P. + Casing	111.5	Hole Circ.	29.0	21.10	1,116	315.3	Hole	
Density (kg/m³)	1,065	D.C. #1	309.6	Bottoms Up	21.4	20.90	1,102	315.8	Dumped	25.0
Mud Grad. (kPa/m)	10.45	D.C. #2		Total Active	44.2				Dilution (L/min)	
Temp (°C)	21	Solids Calculations				Solids Equipment				
Vis (sec/L)	48	H. Grav.	0.0 kg/m³		0.0 %		Type	Screens		
600/300	54/38	L. Grav.	109.2 kg/m³		4.1 %	Shaker	derreck	175	140	140
200/100	31/22	Drill Sol.	123.1 kg/m³		4.6 %	Shaker	derrick	175	140	140
6/3	6/4	Av. Dens.	2,650 kg/m³				U.F. (kg/m³)	O.F.. (kg/m³)	L/min	
P.V. (mPa-sec)	16.0	Oil / Water	0.0 /		95.8	Centrif	1,730	1,060		
Y.P. (Pa)	11.0	E.C.D.	1,082 kg/m³			Centrif	1,715	1,060		
Gels (10sec/10min)	3.0/4.0	Materials req. for 10 kg/m³ increase				Barite (sacks)	19.5	Cal.Carb. (sacks)		38.7
pH	10.5	Low n (slope)	0.49			High n (slope)	0.51			
Filtrate (cc/30)	8.5	Low K (dyn-sec/cm²)	0.92			High K (dyn-sec/cm²)	0.84			
Cake (mm)	1.0	Recommendations & Remarks								
Sand (V/frac)	0.004	Mud looks good for logging, no chml needed.								
Solids (V/frac)	0.042									
M.B.T. (kg/m³)	2.1									
Alkalinity (pF/mF)	1.30/1.60									
Chlorides (mg/L)	19,000									
Calcium (mg/L)	60									
pHpA (Kg/m3)	0.0									
Carbonate (mg/L)	360.00									
Hydroxyl (mg/L)	340.00									
Bicarbonate (mg/L)	0.00									
k+ (mg/L)	20,300.000									
KCL (mg/L)	39,300.000									

Product	Units	Qty.
mf vis	25.0 KG	-1
mf pac	22.7 KG	-1
Alkapam	25.0 KG	-1
Bicarbonate Of	50.0 LB	1
Defoamer	20.0 L	1
Caustic Soda	22.7 KG	2
Lime	20.0 KG	2
Sawdust	1.0 SACK	29
T-352	20.0 L	2
Soda Ash	25.0 KG	2
Corinox	20.0 L	10
Engineering	1.0 EA	4

Well History

Drilled from 2387m to TD @ 2434m, currently circulating to prepare hole for logging.

Alliance Representative				Warehouse	Costs	
Dominic Dube				Consort	Previous	$109,725.03
Home	(780) 499-5668	Cell	(581) 888-1041		Daily	$5,475.93
Location	Edson				Cumulative	$115,200.96

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ANNEXE 4

RAPPORTS JOURNALIERS GEOLOGIQUE

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	23-oct-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	1

GROUND ELEVATION:	33.34	meters	SURFACE CASING		meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Battery Point Fm - Petit Gaspe Mbr* **STATUS:** Drilling ahead in vertical well

LAST 24 Hrs:	Interval (m)	10	76		ROP min.	1.7	ROP max.	30	ROP Av.	7

GEOLOGICAL SUMMARY

Sandstone 95-99%: light grey interbedded with greenish-grey, translucent to transparent and frosted quartz 88-94%, white and yellowish feldspar 2% with pink feldspar 1%, lithic grains 2%, traces of mafic rocks, locally abundant glauconite, occasionally pyrite nodules, lower medium to lower coarse interbedded with upper medium to very coarse and gravel size (micro-conglomerate), angular to subrounded, poor to medium sorted, grain supported fabric with abundant quartz overgrowth infilling pores, quartz cement and matrix 85% replacemen dolomite 14% and secondary calcite relicts cement 1-2%, scattered and locally abundant black bitumen thin layers, interbedded with medium to upper coarse red sandstone 1-2% with Fe-oxide coatings, intercrystalline and pinpoint porosity 10-12%, no shows, Siltstone 1-5%: light to medium grey, lower very fine quartz 75% with argillaceous matrix 25% and quartz and dolomite occasionally very fine idiotopi crystalline cements, traces dark brown to black bitumen and plant fragments, tight, no show

Note: 69m – start gaining water at 3m3/h rate at 1000 kg/m3 density – water flow controlled at 1050 kg/m3 density. Chlorides level increases from 500 mg/l to 2500 mg/l

LAST AVAILABLE HARD SURVEY	Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Vert Sect	Dog Leg	Sub Sea Depth

GAS SUMMARY (units)

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3
No Gas Shows									

REPORTING DEPTH	72.0	mMD	ROTATING HRS:	8.50	hours
PROGRESS	60.0	meters	AVERAGE ROP:	7.06	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1020	RPM	105
VISC(s/l)	33	WOB(daN)	7.0
Ph	10.5	SPP(kPa)	3700
Cl⁻ (mg/l)	500.0	SPM	

HYDRAULICS

BIT RECORD

BIT#	1	2A	1	2	3	4
TYPE	EG1HGLC					
SIZE	311					
DEPTH IN	13					
DEPTH OUT						

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7						
	-	-						
	-	-						

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	24-oct-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	2

GROUND ELEVATION:	33.34	meters	**SURFACE CASING**		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING**		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING**		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *York River Fm* **STATUS:** Drilling ahead in surface hole

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)	72	129		ROP min.	1.7	ROP max.	23	ROP Av.	3.7

Sandstone 85-95%: light grey to greenish-grey, translucent to transparent and frosted quartz 95%, white and yellowish feldspar 2% with pin feldspar 1%, lithic grains 2%, traces of mafic rocks, traces jasper, glauconite traces and locally abundant, occasionally pyrite nodules, lower medium to lower coarse and locally gravel rounded quartz, angular to subrounded and rounded, poor to medium sorted, quartz overgrowth infilling pores, quartz cement and matrix 95% and replacement dolomite and secondary calcite relicts cement 5%, kaolinite 1-2%, intercrystalline and rare pinpoint porosity, no shows Siltstone 10-15%: light to medium grey, lower very fine quartz 80% with argillaceous matrix 20%, traces dark brown to black bitumen and plant fragments, grading to siltitic shale, tight no show, and scattered Shale: medium grey blocky medium indurated slightly siltitic and traces dolomitic

Interval (m)	129	165		ROP min.	2.8	ROP max.	22	ROP Av.	6.2

Argillaceous Siltstone: medium grey, lower very fine quartz 85% with argillaceous matrix 15%, traces dark brown to black bitumen and plant fragments, grading to siltitic shale, tight no show, Shale %: greenish-grey and medium grey blocky medium indurated slightly siltitic and traces dolomitic, Sandstone 30-45%: light grey to greenish-grey, translucent to transparent and frosted quartz 93%, white and yellowish feldspar 3%, lithic grains 2%, mafic rocks 2%, glauconite traces, traces jasper, occasionally pyrite nodules, lower medium to lower coarse and locally gravel rounded quartz and pebble size fragments in micro-conglomerate cm layers, angular to subrounded and rounded, poor to medium sorted, quartz overgrowth infilling pores, quartz cement and matrix 85% and replacement dolomite and locally abundant calcite cement 20%, kaolinite traces, intercrystalline porosity 5-8%, no shows

LAST AVAILABLE HARD SURVEY	Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Vert Sect	Dog Leg	Sub Sea Depth
	174.00	1.92							

GAS SUMMARY (units)

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3
No Gas Shows									

REPORTING DEPTH	165.0	mMD	**ROTATING HRS:**	20.50	hours
PROGRESS	93.0	meters	**AVERAGE ROP:**	4.54	meters per hour

MUD PROPERTIES 06:00		HYDRAULICS		BIT RECORD						
DENS(kg/m³)	1050	RPM	120	BIT#	1A	2A	1	2	3	4
VISC(s/l)	42	WOB(daN)	9	TYPE	EG1HGLC					
Ph	10.0	SPP(kPa)	9000	SIZE	311					
Cl- (mg/l)	2800	SPM		DEPTH IN	13					
				DEPTH OUT						

FORMATION TOPS:	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
	-	-						
	-	-						
TD	-	-						

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	25-oct-09
WELL NAME:	Pétrolia Tar Point Nº 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48º 43' 28.25", 64º 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	3

GROUND ELEVATION:	33.34	meters	SURFACE CASING	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING	meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING	meters
UTM COORDINATES:	5397657	mN	403810 mE	

FORMATION @ 24h00 *York River Fm* **STATUS:** Cement surface casing

LAST 24 Hrs:

Interval (m)	165	213		ROP min.	1.2	ROP max.	8.7	ROP Av.	4.3

GEOLOGICAL SUMMARY

Sandstone 90-97%: greenish-grey and light grey, abundant clear translucent and frosted quartz 83%, white and yellowish and occasionally pink feldspar 5%, lithic grains 6%, mafic rocks 3%, traces jasper, occasionally pyrite nodules, lower fine to lower medium coarsening toward bottom sequence from lower medium to upper coarse, angular to subrounded and rounded, well to medium sorted, quartz overgrowth partially closing pores, quartz cement and matrix 80% and replacement dolomite 10-15% and locally calcite cement 5-15%, tight, no shows, Shale 3-10%: greenish-grey, medium to dark grey, dark grey-brown, slightly siltitic in part, blocky, non to locally pyrite, medium indurated

O&G SHOWS

LAST AVAILABLE HARD SURVEY

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Vert Sect	Dog Leg	Sub Sea Depth
193.25	1.68							

GAS SUMMARY (units)

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3
No Gas Shows									

REPORTING DEPTH	213.0	mMD	ROTATING HRS:	11.25	hours
PROGRESS	48.0	meters	AVERAGE ROP:	4.27	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1130
VISC(s/l)	55
Ph	8.5
Cl- (mg/l)	2800

HYDRAULICS

RPM	77
WOB(daN)	8
SPP(kPa)	9600
SPM	

BIT RECORD

BIT#	1	2	3	4	5	6
TYPE	EG1HGLC	EG1HGLC				
SIZE	311	311				
DEPTH IN	13	168				
DEPTH OUT	168	213				

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
	-	-						
	-	-						

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	26-oct-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	4

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810 mE		

FORMATION @ 24h00 *York River* STATUS: Drill out cement and casing shoe

LAST 24 Hrs:	Interval (m)		ROP min.		ROP max.		ROP Av.	
GEOLOGICAL SUMMARY	No drilling progress for the last 24 hours.							
O&G SHOWS								

LAST AVAILABLE HARD SURVEY	Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Vert Sect	Dog Leg	Sub Sea Depth
	193.25	1.68							

GAS SUMMARY (units)

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3
No Gas shows									

REPORTING DEPTH	213.0	mMD	ROTATING HRS:	-	hours
PROGRESS	0.0	meters	AVERAGE ROP:		meters per hour

MUD PROPERTIES 06:00		HYDRAULICS		BIT RECORD						
DENS(kg/m^3)	1000	RPM	37	BIT#	1	2	3	4	5	6
VISC(s/l)	30	WOB(daN)	3	TYPE	EG1HGLC	EG1HGLC	MSR13M			
Ph	11.0	SPP(kPa)	9830	SIZE	311	311	216			
Cl- (mg/l)	n/a	SPM		DEPTH IN	13	168	213			
				DEPTH OUT	168	213				

FORMATION TOPS:	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
	-	-						
	-	-						

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	27-oct-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	5

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810 mE		

FORMATION @ 24h00 *York River* **STATUS:** Running into hole with directional tools

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)		213	237	ROP min.	14	ROP max.	37	ROP Av.	31

Sandstone 94%: greenish-grey, translucent frosted and locally clear quartz 83%, white and yellowish and occasionally pink feldspar 10%, lithic grains 8%, mafic rocks 4-5%, glauconite <1%, traces jasper, occasionally pyrite nodules, lower to upper medium and 5% lower coarse, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix 85% and replacement dolomite 10% and locally calcite cement 4% and traces kaolinite, inferred 3-5% interparticulate porosity, no shows, Shale 6%: greenish-grey, medium to dark grey, dark grey-brown, slightly siltitic in part, blocky, non to locally pyrite, medium indurated

Interval (m)		237	351	ROP min.	20	ROP max.	72	ROP Av.	42

Argillaceous Siltstone 63%: medium grey, lower very fine quartz with quartz cement and thin layers with dolomitic cement, and very locally thin fractures with calcite and dolomite infill, scattered bitumen, tight, no shows, grading to Siltitic Shale 35%: greenish-grey, medium to dark grey, dark grey-brown, slightly to very siltitic and grading to argillaceous siltstone part, blocky, locally pyrite, non to very slightly dolomitic when siltitic, medium indurated, Sandstone 1-2%: greenish-grey

Interval (m)		351	374	ROP min.	5	ROP max.	31	ROP Av.	12.3

andstone 95%: greenish-grey, translucent frosted and locally clear quartz 83%, white and yellowish and pink feldspar 10%, lithic grains 8%, mafic rocks 4-5%, glauconite <1%, traces jasper, occasionally pyrite nodules, fine to medium size muscovite and scattered biotite flacks, lower to upper medium and 3% lower coarse, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix 85% and replacement dolomite 10% and locally calcite cement 4% and traces kaolinite, inferred 3-5% interparticulate porosity, amber to dark brown scattered bitumen, fractures infilled with coarse calcite and secondary dolomite and inferred porosity, instant weak white cut, pale yellow fluorescence, with Shale 3%: greenish-grey, medium to dark grey, chips with fracture slickenside planes and Argillaceous Siltstone 2%: as above

Interval (m)		351	398	ROP min.	7	ROP max.	32	ROP Av.	14

Argillaceous siltstone and siltitic shales

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
413.74	4.30	299.4	413.47	3.96	-9.11	1.54	9.24	-375.11
423.38	4.70	305.4	423.08	4.37	-9.74	1.92	9.98	-384.72
432.97	5.00	310.40	432.64	4.87	-10.38	1.62	10.78	-394.28

GAS SUMMARY (units) Background Gas: 23 Background Gas:

Interval (m)		Total Gas	C1	C3	Interval (m)		Total Gas	C1	C3
351	373	111	20	91					

REPORTING DEPTH	398.0	mMD	ROTATING HRS:	12.75	hours
PROGRESS	185.0	meters	AVERAGE ROP:	14.51	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1105
VISC(s/l)	43
Ph	10.5
Cl- (mg/l)	16000.0

HYDRAULICS

RPM	36
WOB(daN)	3
SPP(kPa)	9800
SPM	

BIT RECORD

BIT#	1	2	3	4	5	6
TYPE	EG1HGLC	EG1HGLC	MSR13M			
SIZE	311	311	216			
DEPTH IN	13	168	213			
DEPTH OUT	168	213	397			

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
	-	-						
	-	-						

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	28-oct-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	6

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810 mE		

FORMATION @ 24h00 *York River* **STATUS:** Tripping out for changing bit

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)		398	481	ROP min.	8	ROP max.	35	ROP Av.	23

Siltstone 92%: light grey when clean to medium grey and brownish grey when argillaceous, lower very fine quartz, angular to subrounded, well sorted, quartz grading to argillaceous cement, very fine to fine muscovite flacks, occasionally bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, slow fainted white cut, weak straw yellow fluorescence, grading to Siltitic Shale 5%: medium grey-brown, medium grey, secondary brown, slightly to very siltitic and grading to argillaceous siltstone, blocky, locally pyrite, non dolomitic, medium indurated, with thin Sandstone 3%: greenish-grey

Interval (m)		481	640	ROP min.	5	ROP max.	38	ROP Av.	11.5

Sandstone 85%: greenish-grey, translucent frosted quartz 74%, white and yellowish and very rare pink feldspar 10%, lithic grains 8%, mafic rocks 5%, traces jasper, traces glauconite, scattered pyrite nodules, fine to medium size rare muscovite flacks, upper fine to upper medium, slightly argillaceous on top, angular to subrounded,, well to moderate sorted, quartz overgrowth partially infill pores, quartz cement and matrix 50% and replacement dolomite and rare calcite relict cement, inferred 5% interparticulate porosity, locally amber to dark brown scattered bitumen, very fainted white cut, straw yellow fluorescence, Shale 3%: medium grey-brown, medium grey, secondary brown, slightly to very siltitic and grading to Argillaceous Siltstone 12%: light greenish-grey medium grey and brownish grey -few fractures zones, mainly in siltstones, with calcite infills. The weak gas shows are related to this fractures.

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
605.79	18.50	324.9	602.26	28.16	-30.35	4.09	41.38	-563.90
615.41	19.90	324.6	611.35	30.75	-32.18	4.38	44.50	-572.99
625.05	20.30	322.90	620.40	33.42	-34.14	2.20	47.77	-582.04

GAS SUMMARY (units) Background Gas: 27 Background Gas:

Interval (m)		Total Gas	C1	C3	Interval (m)		Total Gas	C1	C3
447	456	91	20	71					
545	553	56	16	40					

REPORTING DEPTH	640.0	mMD	ROTATING HRS:	17.50	hours
PROGRESS	242.0	meters	AVERAGE ROP:	13.83	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1065
VISC(s/l)	43
Ph	10.5
Cl- (mg/l)	11500

HYDRAULICS

RPM	26
WOB(daN)	5
SPP(kPa)	11400
SPM	

BIT RECORD

BIT#	1	2	3	3RR	4	5
TYPE	EG1HGLC	EG1HGLC	MSR13M	MSR13M	Q505	
SIZE	311	311	216	216	216	
DEPTH IN	13	168	213	398	640	
DEPTH OUT	168	213	398	640		

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7						
	-	-						
	-	-						

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	29-oct-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	7

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *York River* **STATUS:** Drilling ahead in tangent section

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)		640	703	ROP min.	11	ROP max.	28	ROP Av.	15

Sandstone 98%: light grey to very light greenish-grey, translucent to transparent quartz 90%, white and flesh-yellowish feldspar 3%, lithic grains 5%, traces of mafic rocks, glauconite traces to 1%, traces jasper grains, upper fine to upper medium, angular to subangular, well sorted, grain supported fabric with abundant quartz overgrowth infilling pores, quartz cement 60-75% replacement dolomite cement 25-40%, kaolinite 1-2%, scattered to abundant black bitumen in pores, low to medium relief, tight to occasionally inferred intercrystalline porosity 4-6%, no show Dolomitic Veins and Healed Fractures 2%: very coarse crystalline limpid to translucent rhombic dolomite, polymodal size, euhedral shape, idiotopic texture, with no or drusy cement, no matrix, tight

Interval (m)		703	759	ROP min.	13	ROP max.	41	ROP Av.	20

Sandstone 90%: greenish-grey, amber to dark brown abundant bitumen thin lenses, slow fainted white cut, weak straw yellow fluorescence
Siltstone 10%: light grey when clean to medium grey and brownish grey when argillaceous, occasionally bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, slow fainted white cut, weak straw yellow fluorescence

Interval (m)		759	821	ROP min.	7	ROP max.	33	ROP Av.	8

Siltitic Shale : medium to dark brownish-grey, very siltitic to locally slightly siltitic, abundant organic material in part, blocky , medium indurated, scattered slickenside surfaces, Argillaceous Siltstone: medium grey and medium brownish-grey, lower very fine quartz, angular to subrounded, well sorted, quartz and argillaceous cement, slightly dolomitic in part, rare very fine to fine muscovite flacks, grading to dark grey siltitic shale, scattered bitumen and organic matter hair thin interbedded layers and amber to dark brown bitumen thin lenses, grading locally to light grey Sandstone

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
817.69	21.30	315.0	801.02	81.66	-80.36	3.29	114.57	-762.66
827.32	21.00	319.2	810.00	84.20	-82.73	4.81	118.04	-771.64
836.95	20.40	321.80	819.01	86.83	-84.89	3.42	121.43	-780.65

GAS SUMMARY (units)

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3
No Gas Shows									

REPORTING DEPTH	821.0	mMD	ROTATING HRS:	14.25	hours
PROGRESS	181.0	meters	AVERAGE ROP:	12.70	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1080
VISC(s/l)	44
Ph	10.0
Cl- (mg/l)	16500

HYDRAULICS

RPM	26
WOB(daN)	5
SPP(kPa)	12900
SPM	

BIT RECORD

BIT#	1	2	3	3RR	4	5
TYPE	EG1HGLC	EG1HGLC	MSR13M	MSR13M	Q505	
SIZE	311	311	216	216	216	
DEPTH IN	13	168	213	398	640	
DEPTH OUT	168	213	398	640	909	

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
	-	-						
	-	-						

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	30-oct-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	8

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810 mE		

FORMATION @ 24h00 *York River* STATUS: Sdilling in tangent section

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)		821	861	ROP min.	2	ROP max.	25	ROP Av.	8.75

Sandstone 85-90%: medium grey upper and greenish-grey lower, argillaceous on top to very slightly argillaceous on bottom, amber to dark brown scattered bitumen in pores, slow fainted white cut, weak straw yellow fluorescence Argillaceous Siltstone 10-15%: medium grey and medium brownish-grey, lower very fine quartz, grading to dark grey siltitic shale, rare bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, rare fracture zone infilled with large crystalline calcite, Siltitic Shale 2-3%: medium to dark brownish-grey, very siltitic to locally slightly siltitic, abundant organic material in part, blocky , medium indurated, scattered slickenside surfaces

Interval (m)		861	910	ROP min.	4	ROP max.	38	ROP Av.	10.4

Argillaceous Siltstone 75-80%: light to medium grey and medium brownish-grey, lower very fine quartz, slightly dolomitic in part, locally very fine to fine muscovite flacks, grading to dark grey siltitic shale, rare bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses, rare fracture zone infilled with large crystalline calcite, Siltitic Shale 20-23%: medium to dark brownish-grey, very siltitic to locally slightly siltitic, abundant organic material in part, blocky, scattered slickenside surfaces, Sandstone 2%: medium grey upper and greenish-grey lower, argillaceous, amber to dark brown scattered bitumen in pores, slow fainted white cut, weak straw yellow fluorescence

Interval (m)		910	940	ROP min.	2	ROP max.	25	ROP Av.	8.75

Sandstone 98%: light to medium and greenish-grey, very slightly argillaceous in part, translucent and frosted quartz 84%, white with traces of yellowish and flesh feldspar 7% with very rare pink, lithic grains 6%, mafic rocks 2%, occasionally pyrite nodules, rare fine muscovite and occasionally biotite flakes, glauconite traces, upper fine to lower medium and 8% upper medium, prograding toward bottom to upper medium and very rare lower coarse 5%, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix and scattered replacement dolomite with none to 2-3% argillaceous matrix, abundant amber to rare dark brown bitumen in pores, orange uncut fluorescence from bitumen, slow fainted white cut, weak straw yellow fluorescence Siltitic Shale 2%: medium to dark greenish-grey and dark grey, locally slightly siltitic, blocky, medium indurated, scattered slickenside surfaces

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
942.91	19.50	313.7	918.28	114.92	-108.92	1.92	158.28	-879.92
952.55	19.80	313.0	927.36	117.15	-111.28	1.19	161.52	-889.00
962.18	19.70	313.80	936.43	119.38	-113.65	0.90	164.78	-898.07

GAS SUMMARY (units)

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3
No Gas Shows									

REPORTING DEPTH	940.0	mMD	ROTATING HRS:	12.50	hours
PROGRESS	119.0	meters	AVERAGE ROP:	9.52	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1075	RPM	34
VISC(s/l)	9.5	WOB(daN)	7
Ph	9.5	SPP(kPa)	10700
Cl- (mg/l)	13000	SPM	

HYDRAULICS

BIT RECORD

BIT#	1	2	3	3RR	4	5
TYPE	EG1HGLC	EG1HGLC	MSR13M	MSR13M	Q505	MSF513M
SIZE	311	311	216	216	216	216
DEPTH IN	13	168	213	398	640	909
DEPTH OUT	168	213	398	640	909	

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
	-	-						
	-	-						

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	31-oct-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	9

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING**		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING**		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *York River* **STATUS:** Drilling ahead in tangent section

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)		940	1011	ROP min.	2.3	ROP max.	18	ROP Av.	5.96

Sandstone 94%: light to medium and greenish-grey, very slightly argillaceous in part, translucent and frosted quartz 84%, white with traces of yellowish and flesh feldspar 7% with very rare pink, lithic grains 6%, mafic rocks 2%, occasionally pyrite nodules, traces jasper, rare fine muscovite and occasionally biotite flakes, glauconite traces, upper fine to lower medium and 8% upper medium, prograding toward bottom to upper medium and very rare lower coarse 5%, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth partially infill pores, quartz cement and matrix and abundant replacement dolomite with none to 2-3% argillaceous matrix, locally abundant calcite cement and locally thin fractures infilled with calcite, abundant amber to rare dark brown bitumen in pores, orange uncut fluorescenc from bitumen, slow fainted white cut, weak straw yellow fluorescence, Shale 3%: medium to dark greenish-grey and dark grey, locally waxy greenish slightly bentonitic, blocky, medium indurated, scattered slickenside surfaces, grading locally to Argillaceous Siltstone 3%: medium grey and medium greenish-grey and locally brownish, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quart

Interval (m)		1011	1049	ROP min.	1.2	ROP max.	4.7	ROP Av.	4.1

Sandstone 78%: light to medium and greenish-grey, very slightly argillaceous in part, translucent and frosted quartz 80%, white with traces of yellowish and flesh feldspar 6%, lithic grains 11%, mafic rocks 2%, rare fine muscovite, upper fine to upper medium, angular to subrounded and rare rounded, well to medium sorted, quartz overgrowth, quartz cement and matrix and abundant replacement dolomite with none to scattered 1-2% argillaceous matrix, locally abundant calcite cement and grains, moderately amber to rare dark brown bitumen in pores, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw yellow fluorescence, Siltitic Shale 8%: medium greenish-grey, locally slightly siltitic, blocky, medium indurated, Argillaceous Siltstone 14%: light to medium grey and medium greenish-grey, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz dolomite and argillaceous cement, locally very fine to fine muscovite flacks, grading to dark grey siltitic shale, rare bitumen hair thin interbedded layers and amber to dark brown abundant bitumen thin lenses

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
1029.64	20.80	316.3	999.89	135.73	-129.63	1.41	187.64	-961.53
1039.37	21.10	316.5	1008.98	138.25	-132.03	0.95	191.12	-970.62
1048.94	21.00	316.30	1017.91	140.74	-134.40	0.39	194.56	-979.55

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3
No Gas Shows									

REPORTING DEPTH	1049.0	mMD	**ROTATING HRS:**	19.75	hours
PROGRESS	109.0	meters	**AVERAGE ROP:**	5.52	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1070	RPM	36
VISC(s/l)	42	WOB(daN)	7
Ph	9.5	SPP(kPa)	14200
Cl- (mg/l)	9000	SPM	

HYDRAULICS

BIT RECORD

BIT#	1	2	3	3RR	4	5
TYPE	EG1HGLC	EG1HGLC	MSR13M	MSR13M	Q505	MSF513M
SIZE	311	311	216	216	216	216
DEPTH IN	13	168	213	398	640	909
DEPTH OUT	168	213	398	640	909	

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
	-	-						
	-	-						

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	01-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	10

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING**		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING**		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *York River* **STATUS:** Drilling in tangent section

LAST 24 Hrs:	**Interval (m)**		**1040**	**1130**	**ROP min.**	**2.8**	**ROP max.**	**7**	**ROP Av.**	**4.9**

GEOLOGICAL SUMMARY

Interbedded sandstone sequences with siltstone and shales. Abundant to scattered amber to black bitumen predominantly in siltstone, with orange uncut fluorescence. Occasionally weak white cut and fainted fluorescence. No oil or gas shows.

O&G SHOWS

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
1116.23	21.10	315.3	1080.74	158.08	-151.13	1.69	218.64	-1042.38
1125.96	20.70	313.4	1089.83	160.50	-153.61	2.43	222.11	-1051.47
1135.50	20.10	312.60	1098.77	162.77	-156.04	2.08	225.44	-1060.41

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3
No Gas Shows									

REPORTING DEPTH	1131.0	mMD	**ROTATING HRS:**	16.75	hours
PROGRESS	82.0	meters	**AVERAGE ROP:**	4.90	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m^3)	1080
VISC(s/l)	40
Ph	10.5
Cl- (mg/l)	9500

HYDRAULICS

RPM	38
WOB(daN)	10
SPP(kPa)	15600
SPM	

BIT RECORD

BIT#	1	2	3	3RR	4	5
TYPE	EG1HGLC	EG1HGLC	MSR13M	MSR13M	Q505	MSF513M
SIZE	311	311	216	216	216	216
DEPTH IN	13	168	213	398	640	909
DEPTH OUT	168	213	398	640	909	1171

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6

CORE #	**LITHOLOGY**	**INTERVAL**			**CUT**	**REC.**	**% REC.**
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	02-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	11

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *York River* STATUS: Drilling in tangent section

LAST 24 Hrs:
GEOLOGICAL SUMMARY
O&G SHOWS

Interval (m)		1131	1183	ROP min.	1.3	ROP max.	10.1	ROP Av.	3.5

Sandstone 50%: light to medium grey and greenish-grey, translucent and frosted quartz 80%, white with traces of yellowish and flesh feldspar 6% lithic grains 10%, mafic rocks 2%, fine muscovite and occasionally biotite flakes, upper fine to upper medium, angular to subrounded, well sorted, quartz overgrowth partially infill pores, quartz cement and matrix 90% replacement dolomite 5%, locally argillaceous matrix 3-5%, scattered thin fractures and veins infilled with calcite, moderate to abundant amber to rare dark brown bitumen in pores and thin fractures, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw yellow fluorescence, Shale 35%: medium to dark greenish-grey and dark grey, dark brown with organic matter content, non to very siltitic grading locally to argillaceous siltstone, blocky, medium indurated, rare slickenside surfaces, Argillaceous Siltstone 15%: light to medium grey, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz dolomite and argillaceous cement, locally very fine to fine muscovite and scattered biotite flacks, grading to dark grey siltitic shale, with very fine

Interval (m)		1183	1194	ROP min.	5.4	ROP max.	12	ROP Av.	8.7

Sandstone 100%: light to medium grey and greenish-grey, translucent and frosted quartz 89%, white with traces of yellowish and flesh feldspar 5% lithic grains 4%, mafic rocks 2%, fine muscovite and occasionally biotite flakes, lower to upper medium, angular to subrounded, well sorted, quartz overgrowth partially infill pores, quartz cement and matrix 90% replacement dolomite 5-7%, abundant amber to rare dark brown bitumen in pores and thin fractures (floating in washed water), orange uncut fluorescence from bitumen, slow developing fainted white cut, weak straw yellow fluorescence

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
1193.74	19.30	314.7	1153.72	176.19	-169.89	0.33	244.71	-1115.36
1203.26	19.30	315.1	1162.71	178.41	-172.11	0.42	247.86	-1124.35
1212.89	19.50	315.50	1171.79	180.68	-174.36	0.75	251.06	-1133.43

GAS SUMMARY (units) (*100units = 1%*)

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3
No gas Shows									

REPORTING DEPTH	1194.0	mMD	ROTATING HRS:	12.00	hours
PROGRESS	63.0	meters	AVERAGE ROP:	5.25	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1055
VISC(s/l)	40
Ph	10.5
Cl- (mg/l)	8000

HYDRAULICS

RPM	36
WOB(daN)	11
SPP(kPa)	16100
SPM	

BIT RECORD

BIT#	2	3	3RR	4	5	6
TYPE	EG1HGLC	MSR13M	MSR13M	Q505	MSF513M	MS1613UBPX
SIZE	311	216	216	216	216	216
DEPTH IN	168	213	398	640	909	1171
DEPTH OUT	213	398	640	909	1171	

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	03-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	12

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *York River* **STATUS:** Drilling ahead in tangent well

LAST 24 Hrs: Interval (m) 1194 1302 ROP min. 2 ROP max. 12.7 ROP Av. 5.7

GEOLOGICAL SUMMARY
O&G SHOWS

Sandstone 80%: light to medium grey and greenish-grey, translucent and frosted quartz 89%, white with traces of yellowish and flesh feldspar 6% lithic grains 8%, mafic rocks 5%, scattered fine muscovite and occasionally biotite flakes, upper fine to lower medium, angular to subrounded, well sorted, quartz overgrowth infill pores, quartz cement and matrix 90% replacement dolomite 8-10% and locally abundant calcite cement, very abundant amber to rare dark brown bitumen in pores and thin fractures (floating in washed water), orange uncut fluorescence from bitumen, slow developing fainted white cut, weak straw yellow fluorescence, rare interbedded with Argillaceous Siltstone 15%: light to medium grey, lower very fine quartz, angular to subrounded, well sorted, slightly to very argillaceous, quartz dolomite and argillaceous cement, locally very fine to fine muscovite and scattered biotite flacks, grading to dark grey siltitic shale, with very fine sandstone thin stringers, moderate to abundant amber to rare dark brown bitumen in pores and thin layers, and scattered Shale 10%: medium to dark greenish-grey and dark grey, occasionally dark brown with organic matter content, non to slightly siltitic grading locally to ar

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
1280.27	19.30	315.5	1235.18	196.84	-190.50	2.75	273.89	-1196.82
1289.90	19.40	316.1	1244.27	199.13	-192.73	0.69	277.09	-1205.91
1299.55	19.60	317.60	1253.36	201.48	-194.93	1.68	280.30	-1215.00

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: 21					Background Gas: 23				
Interval (m)		Total Gas	C1	C3	Interval (m)		Total Gas	C1	C3
1203	1205	56	40	16	1285	1286	51	39	12
1234	1235	81	60	21					
1254	1255	85	67	18					

REPORTING DEPTH	1302.0	mMD	ROTATING HRS:	19.00	hours
PROGRESS	108.0	meters	AVERAGE ROP:	5.68	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1070
VISC(s/l)	44
Ph	10.5
Cl- (mg/l)	8200

HYDRAULICS

RPM	36
WOB(daN)	8
SPP(kPa)	15800
SPM	

BIT RECORD

BIT#	2	3	3RR	4	5	6
TYPE	EG1HGLC	MSR13M	MSR13M	Q505	MSF513M	MS1613UBPX
SIZE	311	216	216	216	216	216
DEPTH IN	168	213	398	640	909	1171
DEPTH OUT	213	398	640	909	1171	

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	04-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	13

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *York River* **STATUS:** Drilling ahead in tangent section

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)	1302	1334	ROP min.	2	ROP max.	16.5	ROP Av.	6.7

Sandstone 60%: light to medium grey and greenish-grey, translucent and frosted quartz 82%, white with traces of yellowish and flesh feldspar 6% lithic grains 8%, mafic rocks 3%, scattered fine muscovite and occasionally biotite flakes, lower fine to lower medium, angular to subrounded, well sorted, quartz overgrowth infill pores, quartz cement and matrix 95% replacement dolomite 5% and locally abundant calcite cement, moderate amber to rare dark brown bitumen in pores and thin fractures (floating in washed water), tight, with Argillaceous Siltstone 40%: light to medium grey, lower very fine quartz, angular to subrounded, well sorted, slightly to very argillaceous, quartz dolomite and argillaceous cement, locally very fine to fine muscovite and scattered biotite flacks, grading to dark grey siltitic shale with very fine sandstone thin stringers, moderate to abundant amber to rare dark brown bitumen in pores

Interval (m)	1334	1361	ROP min.	1	ROP max.	12.4	ROP Av.	3.6

Sandstone 70-80%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 82%, white with yellowish rare and feldspar 6%, lithic grains 6%, mafic rocks 2%, traces jasper, scattered fine muscovite flakes, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 3% and traces calcite cement, moderate to scattered amber to rare dark brown bitumen in pores, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw-yellow fluorescence, Shale 15-20%: dominantly medium to dark grey with dark brown waxy sequences, when dark brown with organic matter content, non to slightly siltitic, blocky, medium indurated, abundant slickenside surfaces, interbedded with Argillaceous Siltstone 5%: light to medium grey and slightly brownish, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz and rare dolomite and argillaceous cement, scattered very fine to fine muscovite, moderate to abundant amber to rare dark brown bitumen in pores, tight

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
1299.55	19.60	317.6	1253.36	201.48	-194.93	1.68	280.30	-1215.00
1309.00	19.90	318.5	1262.26	203.86	-197.06	1.36	283.49	-1223.90
1350.00	19.47							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)	Total Gas	C1	C3	Background Gas: Interval (m)	Total Gas	C1	C3
No Gas Shows							

REPORTING DEPTH	1361.0	mMD	ROTATING HRS:	13.50	hours
PROGRESS	59.0	meters	AVERAGE ROP:	4.37	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1075
VISC(s/l)	44
Ph	10.0
Cl- (mg/l)	9000

HYDRAULICS

RPM	36
WOB(daN)	12
SPP(kPa)	17500
SPM	

BIT RECORD

BIT#	3	3RR	4	5	6	7
TYPE	MSR13M	MSR13M	Q505	MSF513M	MS1613UBPX	MS1616WM
SIZE	216	216	216	216	216	216
DEPTH IN	213	398	640	909	1171	1328
DEPTH OUT	398	640	909	1171	1328	

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	05-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	14

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810 mE		

FORMATION @ 24h00 *York River* STATUS: Drilling ahead in tangent section

LAST 24 Hrs:

Interval (m)		1361	1404	ROP min.	1.9	ROP max.	5.7	ROP Av.	4.35

GEOLOGICAL SUMMARY
O&G SHOWS

Sandstone 70-80%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 82%, white with yellowish rare and feldspar 6%, lithic grains 6%, mafic rocks 2%, traces jasper, scattered fine muscovite flakes, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 3% and traces calcite cement, moderate to scattered amber to rare dark brown bitumen in pores, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw-yellow fluorescence, Shale 15-20%: dominantly medium to dark grey with dark brown waxy sequences, when dark brown with organic matter content, non to slightly siltitic, blocky, medium indurated, abundant slickenside surfaces, interbedded with Argillaceous Siltstone 5%: light to medium grey and slightly brownish, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz and rare dolomite and argillaceous cement, scattered very fine to fine muscovite, moderate to abundant amber to rare dark brown bitumen in pores, tight

Interval (m)		1414	1440	ROP min.	1.8	ROP max.	14	ROP Av.	3.6

Sandstone 96%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 82%, white with yellowish rare and feldspar 6%, lithic grains 6%, mafic rocks 2%, traces jasper, scattered fine muscovite flakes, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 97% replacement dolomite 3% and traces calcite cement, moderate to scattered amber to rare dark brown bitumen in pores, scattered orange uncut fluorescence from bitumen, instant fainted white cut, weak straw-yellow fluorescence, Argillaceous Siltstone 2%: light to medium grey and slightly brownish, lower very fine quartz, angular to subrounded, well sorted, slightly argillaceous, quartz and rare dolomite and argillaceous cement, scattered very fine to fine muscovite, moderate to abundant amber to rare dark brown bitumen in pores, tight, 1410-1414m - Dolomitic Healed Fractures 2%: very coarse crystalline rhombic dolomite, polymodal size, euhedral to anhedral shape, idiotopic texture, with no or drusy cement, no matrix, tight

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
1309.00	19.90	318.5	1262.26	203.86	-197.06	1.36	283.49	-1223.90
1350.00	19.47							
1412.00	>20							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3
No Gas Shows									

REPORTING DEPTH	1440.0	mMD	ROTATING HRS:	20.50	hours
PROGRESS	79.0	meters	AVERAGE ROP:	3.85	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m^3)	1079
VISC(s/l)	44
Ph	10.0
Cl- (mg/l)	7500

HYDRAULICS

RPM	38
WOB(daN)	14
SPP(kPa)	18880
SPM	

BIT RECORD

BIT#	3	3RR	4	5	6	7
TYPE	MSR13M	MSR13M	Q505	MSF513M	MS1613UBPX	MS1616WM
SIZE	216	216	216	216	216	216
DEPTH IN	213	398	640	909	1171	1328
DEPTH OUT	398	640	909	1171	1328	1443

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	06-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	15

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *York River* **STATUS:** Drilling ahead in tangent section

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)		1440	1486	ROP min.	9	ROP max.	22	ROP Av.	15

Sandstone 97%: light to medium grey and greenish-grey, moderate amber and dark brown bitumen and organic material in pores veins and very small lenses, scattered to abundant orange uncut fluorescence from bitumen, very slow developing fainted white cut, scattered very thin Dolomite lenses with cream microcrystalline grain-supported dolomite, tight

Interval (m)		1485	1532	ROP min.	6	ROP max.	20	ROP Av.	10.2

Sandstone 85%: light to medium grey and greenish-grey, moderate amber and dark brown bitumen and organic material in pores veins and very small lenses, scattered orange uncut fluorescence from bitumen, no other shows, Siltitic Shale 15%: medium grey to rare dark grey, siltitic and occasionally micromicaceous, blocky, grading locally to argillaceous siltstone

Interval (m)		1538	1550	ROP min.	9.5	ROP max.	22	ROP Av.	14

Siltstone light to medium grey, abundant amber and dark brown bitumen and organic material in pores veins and very small lenses, scattered orange uncut fluorescence from bitumen grading to dark brown Siltitic Shale , medium grey to dark bituminous, abundant slickenside surfaces particularly in bituminous shales, **Open Fracture 1533-1534m: 2m fracture zone infilled with milky anhedral microcrystalline to locally large crystalline calcite, bright white uncut fluorescence, instant milky strong white cut, bluish-white fluorescence**, Sandstone locally abundant calcite cement (1455m sample), moderate amber and dark brown bitumen and organic material in pores thin interbeds and small lenses, very abundant in 1544-1549m, orange uncut fluorescence from bitumen, instant milky white cut, bluish-white fluorescence, **Open Fracture 1541-1548m: 7m fracture zone infilled with milky and locally transparent anhedral to sub-euhedral microcrystalline to locally large crystalline calcite, bright white uncut fluorescence, instant milky strong white cut, bluish-white fluorescence**

Interval (m)		1550	1582	ROP min.	7	ROP max.	17	ROP Av.	9.8

Sandstone 70-75%: no shows, Siltitic Shale 25-30%: scattered chips with slickenside surfaces, Healed Fracture 1578m: fracture zone infilled with clean milky white anhedral microcrystalline to locally large crystalline calcite, tight, no shows

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
1543.00	>20							
1581.00	>20							

GAS SUMMARY (units) Background Gas: 23 Background Gas:

(100units = 1%)

Interval (m)		Total Gas	C1	C3	Interval (m)		Total Gas	C1	C3
1533	1534	675	504	171					
1541	1548	2025	1830	195					

REPORTING DEPTH	1582.0	mMD	ROTATING HRS:	12.75	hours
PROGRESS	142.0	meters	AVERAGE ROP:	11.14	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1070
VISC(s/l)	44
Ph	10.0
Cl- (mg/l)	6500

HYDRAULICS

RPM	31
WOB(daN)	8
SPP(kPa)	19600
SPM	

BIT RECORD

BIT#	3RR	4	5	6	7	8
TYPE	MSR13M	Q505	MSF513M	MS1613UBPX	MS1616WM	MSR616M-A2D
SIZE	216	216	216	216	216	216
DEPTH IN	398	640	909	1171	1328	1443
DEPTH OUT	640	909	1171	1328	1440	

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	07-nov-09
WELL NAME:	Pétrolia Tar Point Nº 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48º 43' 28.25", 64º 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	16

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *York River* **STATUS:** Tripping for bit

LAST 24 Hrs:	Interval (m)		1582	1711	ROP min.	0.9	ROP max.	40	ROP Av.	6.8

GEOLOGICAL SUMMARY O&G SHOWS

Siltitic Shale 80%: light to medium grey and scattered dark grey, moderately to very siltitic and scattered micromicaceous, blocky, medium indurated, occasionally fine disseminated organic matter grading locally to argillaceous siltstone, chips with slickenside surfaces, fracture / fault zone in 1592-1595m interval, interbedded locally with thin layers of Sandstone 10-15%: light to medium grey and greenish-grey, translucent frosted and occasionally abundant clear hypidiomorphic quartz 81%, white with rare yellowish feldspar 5%, lithic grains 10%, mafic rocks 1%, moderately abundant muscovite flakes, traces jasper, lower fine to lower medium, angular to subrounded, well sorted, abundant quartz overgrowth infill pores, quartz cement and matrix 95% replacement dolomite, moderate amber and dark brown bitumen and organic material in pores thin interbeds and small lenses, no shows Siltstone 5%: light grey, lower very fine quartz, angular to subrounded, well sorted, non to slightly argillaceous, quartz rare dolomite and argillaceous cement, very fine to fine disseminate muscovite, abundant amber and dark brown bitumen and organic material in small lenses, tight, no shows, Healed Fracture 1597,1614m: fracture zone infilled with

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
1686.00	>20							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas:				Background Gas:			
Interval (m)	Total Gas	C1	C3	Interval (m)	Total Gas	C1	C3
No Gas Shows							

REPORTING DEPTH	1711.0	mMD	ROTATING HRS:	19.00	hours
PROGRESS	129.0	meters	AVERAGE ROP:	6.79	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1070
VISC(s/l)	44
Ph	10.0
Cl- (mg/l)	5500

HYDRAULICS

RPM	31
WOB(daN)	13
SPP(kPa)	18400
SPM	

BIT RECORD

BIT#	3RR	4	5	6	7	8
TYPE	MSR13M	Q505	MSF513M	MS1613UBPX	MS1616WM	MSR616M-A2D
SIZE	216	216	216	216	216	216
DEPTH IN	398	640	909	1171	1328	1443
DEPTH OUT	640	909	1171	1328	1440	1711

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	08-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	17

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *York River* STATUS: Drilling in tangent section

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)		1711	1784	ROP min.	6	ROP max.	28	ROP Av.	11.22

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
1773.00	>20							

GAS SUMMARY (units) (100units = 1%)

Background Gas:		23			Background Gas:			
Interval (m)		Total Gas	C1	C3	Interval (m)	Total Gas	C1	C3
1780	1781	87	54	33				

REPORTING DEPTH	1784.0	mMD	ROTATING HRS:	6.25	hours
PROGRESS	73.0	meters	AVERAGE ROP:	11.68	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1075
VISC(s/l)	45
Ph	10.0
Cl- (mg/l)	5500

HYDRAULICS

RPM	32
WOB(daN)	7
SPP(kPa)	17500
SPM	

BIT RECORD

BIT#	4	5	6	7	8	9
TYPE	Q505	MSF513M	IS1613UBP	MS1616WM	ISR616M-A2	MSF513M
SIZE	216	216	216	216	216	216
DEPTH IN	640	909	1171	1328	1443	1711
DEPTH OUT	909	1171	1328	1440	1711	

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	09-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	18

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** Drilling in tangent section

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)		1784	1794	ROP min.	6	ROP max.	28	ROP Av.	11.22

Siltstone interbedded with sandstone and 10=15% shale, with rare bitumen pores infill, fainter instant white cut and fluorescence

Interval (m)		1794	1860	ROP min.	8	ROP max.	31	ROP Av.	12.4

Indian Cove: Interbedded siltitic argillaceous limestone 92% with calcareous sandstone 6% ans siltitic, slightly calcitic shale 2%

Interval (m)		1860	1874	ROP min.	10	ROP max.	22	ROP Av.	8.5

Sittitic limestone with relatively abundant heal fractures infill with calcite, fainted white cut and fainted fluorescence, no other shows

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
1871.00	>20							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)	Total Gas	C1	C3	Background Gas: Interval (m)	Total Gas	C1	C3
No Gas Shows							

REPORTING DEPTH	1874.0	mMD	ROTATING HRS:	7.75	hours
PROGRESS	90.0	meters	AVERAGE ROP:	11.61	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1075
VISC(s/l)	45
Ph	10.0
Cl- (mg/l)	5500

HYDRAULICS

RPM	32
WOB(daN)	7
SPP(kPa)	17500
SPM	

BIT RECORD

BIT#	5	6	7	8	9	9
TYPE	MSF513M	S1613UBP	MS1616WM	MSR616M-A2I	MSF513M	MSF613
SIZE	216	216	216	216	216	216
DEPTH IN	909	1171	1328	1443	1711	1807
DEPTH OUT	1171	1328	1440	1711	1807	

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	10-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	19

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810 mE		

FORMATION @ 24h00 *Indian Cove* **STATUS:** Tripping for bit

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)		1874	1881	ROP min.	10	ROP max.	21	ROP Av.	11.2

Limestone 100%: cream to light and medium brown, mottled in part cream and brown, very slightly siltitic, slightly to abundant argillaceous - very fine transparent angular to subangular quartz floating in a calcitic matrix supported fabric, non fossiliferous mudstone with microcrystalline to scattered lower very fine crystalline well sorted subhedral spary-calcite and partially replacement xenomorphic unimodal subeuhedral dolomite, structureless, low relief, instant fainted milky white cut, bluish-white fluorescence, Calcite Healed Fractures: (1869-1881m interval) abundant milky white hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline locally fibrous and prismatic calcite, tight

Interval (m)		1881	1986	ROP min.	0.6	ROP max.	13.5	ROP Av.	5.8

Limestone 100%: cream mottled cream and brown sequences, interbedded with light and medium brown, very slightly siltitic, slightly argillaceous when lighter colour to abundant argillaceous when dark brown - very fine transparent angular to subangular quartz floating in a calcitic matrix supported fabric and scattered partially replacement xenomorphic unimodal subeuhedral dolomite 2% with locally euhedral rhombic visible faces, non fossiliferous, occasionally very fine disseminated organic matter, mudstone, structureless, low relief, instant fainted milky white cut, bluish-white fluorescence, Calcite Healed Fractures: abundant milky white hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline prismatic calcite, locally fibrous calcite, clean contacts with the host rock, tight except 1984-1985m fracture where traces of organic matter lining fracture walls and creating voids - fracture porosity

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
1920.00	>20							

GAS SUMMARY (units) (100units = 1%)

Background Gas:		30.5			Background Gas:			
Interval (m)		Total Gas	C1	C3	Interval (m)	Total Gas	C1	C3
1984	1985	60	49	11				

REPORTING DEPTH	1986.0	mMD	ROTATING HRS:	15.25	hours
PROGRESS	112.0	meters	AVERAGE ROP:	7.34	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1070
VISC(s/l)	53
Ph	10.5
Cl- (mg/l)	4500

HYDRAULICS

RPM	33
WOB(daN)	13
SPP(kPa)	13300
SPM	

BIT RECORD

BIT#	5	6	7	8	9	10
TYPE	MSF513M	S1613UBP	MS1616WM	MSR616M-A2	MSF513M	MSF613
SIZE	216	216	216	216	216	216
DEPTH IN	909	1171	1328	1443	1711	1807
DEPTH OUT	1171	1328	1443	1711	1807	1986

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	11-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	20

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** Drilling in tangent section

Interval (m)		1986	2007	ROP min.	2.3	ROP max.	5	ROP Av.	3.7

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Limestone 98%: cream mottled cream and brown interbedded with medium brown and greyish-brown, non to very slightly siltitic, slightly argillaceous when lighter colour to abundant argillaceous when dark brown, non fossiliferous, mudstone, structureless, low relief, instant very fainted milky white cut, bluish-white fluorescence, Calcite Partially Open Fractures: abundant milky white hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline prismatic calcite, clean contacts with the host rock, tight except 1995-1997m with inferred fracture porosity, (white cut and fluorescence from hydrocarbon rich fluid inclusions in crystalline calcite secondary cements) Shale 1-3%: greenish-grey, non to slightly siltitic, blocky, medium indurated, with scattered slickenside surfaces, Sandstone thin stringers, light greenish-grey, upper very fine to lower fine grained, well sorted, angular to subangular, quartz cement and matrix, tight, no show

Note: The inclination is real while the azimuth is an estimation based on the last known surveys.

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
1714.45	39.00							
1848.00	40.00							
1964.00	42.00							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3
1995	1997	59	39	20					

REPORTING DEPTH	2007.0	mMD	ROTATING HRS:	5.75	hours
PROGRESS	21.0	meters	AVERAGE ROP:	3.65	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1065
VISC(s/l)	51
Ph	10.0
Cl- (mg/l)	5500

HYDRAULICS

RPM	35
WOB(daN)	8
SPP(kPa)	11900
SPM	

BIT RECORD

BIT#	6	7	8	9	10	11
TYPE	IS1613UBP	IS1616WI	SR616M-A2	MSF513M	MSF613	RSR616D-E1
SIZE	216	216	216	216	216	216
DEPTH IN	1171	1328	1443	1711	1807	1986
DEPTH OUT	1328	1443	1711	1807	1986	

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	12-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	21

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* STATUS: Running into hole

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)		2007	2012	ROP min.	1.1	ROP max.	2.4	ROP Av.	2.2

Limestone 97%: cream mottled cream and brown interbedded with medium brown and greyish-brown, non to very slightly siltitic, slightly argillaceous when lighter colour to abundant argillaceous when dark brown, non fossiliferous, mudstone, structureless, low relief, instant very fainted milky white cut, bluish-white fluorescence, Calcite Healed Fractures: occasionally milky white hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline prismatic calcite, clean contacts with the host rock, tight except 1995-1997m with inferred fracture porosity, (white cut and fluorescence from hydrocarbon rich fluid inclusions in crystalline calcite secondary cements) Shale 3%: dark grey to greenish-grey, non to abundant siltitic, blocky, medium indurated, Sandstone thin stringers, light greenish-grey, upper very fine to lower fine grained, well sorted, angular to subangular, quartz cement and matrix, tight, no show

Interval (m)		2012	2026	ROP min.	1	ROP max.	2.6	ROP Av.	1.90

Limestone 97%: cream mottled cream and brown interbedded with medium brown and greyish-brown, non to very slightly siltitic, slightly argillaceous when lighter colour to abundant argillaceous when dark brown, occasionally xenomorphic unimodal subeuhedral dolomite 4%, non fossiliferous, mudstone, structureless, low relief, instant very fainted milky white cut, bluish-white fluorescence, Calcite Healed Fractures: scattered milky white hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline and prismatic calcite, clean contacts with the host rock, tight,, (white cut and fluorescence from hydrocarbon rich fluid inclusions in crystalline calcite secondary cements) Shale 3% in average and 6% in 2013-2016m interval: dark grey to greenish-grey, non to abundant siltitic, blocky, medium indurated, occasionally slickenside surfaces, very scattered Sandstone thin stringers, light greenish-grey, quartz 90%, feldspar 2%, lithic grains 8%, mafic rocks traces, upper very fine to lower fine grained, well sorted, angular to subangular, quartz cement and matrix, tight, no show

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
1848.00	40.00							
1964.00	42.00							
2003.00	38.00							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3
No Gas Shows									

REPORTING DEPTH	2026.0	mMD	ROTATING HRS:	9.00	hours
PROGRESS	19.0	meters	AVERAGE ROP:	2.11	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1060
VISC(s/l)	48
Ph	10.5
Cl- (mg/l)	4500

HYDRAULICS

RPM	31
WOB(daN)	14
SPP(kPa)	14500
SPM	

BIT RECORD

BIT#	7	8	9	10	11	12
TYPE	MS1616WM	SR616M-A	MSF513M	MSF613	RSR616D-E1	R34ADH
SIZE	216	216	216	216	216	216
DEPTH IN	1328	1443	1711	1807	1986	2026
DEPTH OUT	1443	1711	1807	1986	2026	

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	13-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	22

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** Drilling in tangent section

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)		2026	2050	ROP min.	2.9	ROP max.	6.3	ROP Av.	3.9

Limestone 99%: cream, mottled cream and brown, interbedded with medium brown and greyish-brown, non to very siliceous, non to slightly argillaceous when lighter colour to argillaceous when dark brown, occasionally xenomorphic unimodal subeuhedral dolomite 2%, fine disseminated plant fragments and organic matter in brown siliceous limestone, non fossiliferous, mudstone, structureless, low relief, Calcite Healed Fractures 1-2%: abundant milky white hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline and prismatic calcite, clean contacts with the host rock, instant very fainted milky white cut, bluish-white fluorescence, white uncut fluorescence on 2% of rock

Interval (m)		2050	2080	ROP min.	2	ROP max.	4.1	ROP Av.	3.21

Limestone 97%:, medium brown slightly translucent in thin fragments, interbedded with secondary mottled cream and brown, very siliceous to very slightly siltitic when cream, non to slightly argillaceous when lighter colour to more argillaceous when dark brown, very scattered dolomitic, fine disseminated plant fragments and organic matter in brown siliceous limestone, non fossiliferous, mudstone, structureless, low relief, Calcite Partially Healed Fractures 3%: abundant sub-mm hair thin system to cm thin system unfilled with milky and locally translucent hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline and prismatic calcite, clean contacts with the host rock, mainly tight with thin partially open intervals, inferred fracture porosity, white uncut fluorescence on 8% of rock, instant very fainted milky white cut, bluish-white fluorescence

Interval (m)		2080	2089	ROP min.	1.7	ROP max.	2.9	ROP Av.	2.6

Limestone 92%:, medium to dark brown, interbedded with secondary mottled cream and brown, very siliceous to very slightly siltitic when cream, non to slightly argillaceous, fine disseminated organic matter and plant fragments in brown siliceous limestone, non fossiliferous, mudstone, structureless, low relief, Calcite Healed Fractures 8%: abundant sub-mm hair thin system to cm thin system unfilled with milky and locally translucent hypidiomorphic to xenomorphic microcrystalline to medium grained equate shaped crystalline and prismatic calcite, clean contacts with the host rock, mainly tight with thin partially open intervals, inferred fracture porosity, white uncut fluorescence on 6% of rock, instant very fainted milky white cut, bluish-white fluorescence

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2003.00	38.00							
2032.00	37.00							
2080.00	37.00							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas:		26			Background Gas:		24		
Interval (m)		Total Gas	C1	C3	Interval (m)		Total Gas	C1	C3
2054	2056	64	44	20	2078	2080	41	29	12
2063	2065	44	32	12					
2067	2069	55	39	16					

REPORTING DEPTH	2089.0	mMD	ROTATING HRS:	20.25	hours
PROGRESS	63.0	meters	AVERAGE ROP:	3.11	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1050
VISC(s/l)	51
Ph	10.0
Cl- (mg/l)	4700

HYDRAULICS

RPM	36
WOB(daN)	14
SPP(kPa)	10100
SPM	

BIT RECORD

BIT#	7	8	9	10	11	12
TYPE	MS1616WM	SR616M-A	MSF513M	MSF613	RSR616D-E1	R34ADH
SIZE	216	216	216	216	216	216
DEPTH IN	1328	1443	1711	1807	1986	2026
DEPTH OUT	1443	1711	1807	1986	2026	

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	14-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	23

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** Trip for bit and mud motor

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)		2089	2127	ROP min.	1.8	ROP max.	4	ROP Av.	2.6

Limestone 97%:, medium to dark brown, locally interbedded with secondary cream and mottled cream and brown, very siliceous to very slightly siltitic when cream, non to slightly argillaceous and grading to calcitic shale 5-8% toward bottom, locally fine disseminated pyrite, fine disseminated organic matter and plant fragments in brown siliceous limestone, non fossiliferous, mudstone, structureless, low relief, Calcite Healed Fractures 2-5%: moderate abundant fractures unfilled with milky and locally translucent hypidiomorphic microcrystalline to medium and coarse grained equate shaped crystalline and prismatic calcite, scattered fibrous calcite, clean contacts with the host rock, mainly tight with scattered open intervals, inferred fracture porosity, white uncut fluorescence on 5% of rock, instant very fainted milky white cut, bluish-white fluorescence

Interval (m)		2127	2143	ROP min.	2	ROP max.	6.3	ROP Av.	3.4

Limestone 74%:, medium to dark brown, moderate siliceous cryptocrystalline matrix, non to slightly argillaceous and locally grading to calcitic shale 2-3%, locally fine disseminated pyrite, locally pyrite nodules, fine disseminated organic matter and plant fragments, non fossiliferous, mudstone, structureless, low relief, tight, Limestone 25%:, cream, mottled cream and light brown, very slightly siltitic, cryptocrystalline to very fine crystalline, locally fine disseminated pyrite, traces of organic matter and plant fragments on thin parallel beddings, mudstone to scattered wackestone, low relief, tight Calcite Healed Fractures 1-2%: scattered sub-mm to mm fractures and veins system in both limestone types, infill with milky, locally translucent and very light cream, hypidiomorphic microcrystalline to medium and coarse grained equate locally shaped crystalline and prismatic calcite, locally fibrous calcite, clean contacts with the host rock, tight, white uncut fluorescence on 5% of rock, instant very fainted milky white cut, bluish-white fluorescence

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2032.00	37.00							
2080.00	37.00							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas:					Background Gas:			
Interval (m)		Total Gas	C1	C3	Interval (m)	Total Gas	C1	C3
2097	2102	42	29	13				
2127	2131	51	40	11				

REPORTING DEPTH	2143.0	mMD	ROTATING HRS:	18.50	hours
PROGRESS	54.0	meters	AVERAGE ROP:	2.92	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1060
VISC(s/l)	50
Ph	10.0
Cl- (mg/l)	5000

HYDRAULICS

RPM	31
WOB(daN)	14
SPP(kPa)	10300
SPM	

BIT RECORD

BIT#	7	8	9	10	11	12
TYPE	MS1616WM	SR616M-A	MSF513M	MSF613	RSR616D-E1	R34ADH
SIZE	216	216	216	216	216	216
DEPTH IN	1328	1443	1711	1807	1986	2026
DEPTH OUT	1443	1711	1807	1986	2026	2143

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	15-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	24

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING**		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING**		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** Drilling in tangent well

LAST 24 Hrs:

Interval (m)		2143	2159	ROP min.	1.4	ROP max.	3.2	ROP Av.	2.65

GEOLOGICAL SUMMARY O&G SHOWS

Limestone 67%:, medium to dark brown, moderate siliceous cryptocrystalline matrix, very slightly argillaceous, scattered fine disseminated pyrite, locally pyrite nodules, fine disseminated organic matter and plant fragments, non fossiliferous, mudstone, structureless, low relief, tight, Limestone 30%:, cream, mottled cream and light brown, very slightly siltitic, cryptocrystalline to very fine crystalline, locally fine disseminated pyrite, traces of organic matter and plant fragments on thin parallel beddings, mudstone to scattered wackestone, low relief, tight Calcite Open Fractures 3%: scattered mm to cm fractures and veins system in both limestone types, infill with milky, locally translucent and very light cream, hypidiomorphic microcrystalline to medium and coarse grained equate locally crystalline and prismatic calcite, locally fibrous calcite, clean contacts with the host rock, fracture porosity, white uncut fluorescence on 3-5% of rock, instant milky white cut, straw fluorescence

Interval (m)		2159	2169	ROP min.	1.7	ROP max.	2.5	ROP Av.	2.3

Limestone 76%:, medium to dark brown, moderate siliceous cryptocrystalline matrix, slightly argillaceous, scattered fine disseminated pyrite locally pyrite nodules, fine disseminated organic matter and plant fragments, non fossiliferous, mudstone, structureless, low relief, tight, Limestone 22%:, cream, mottled cream and light brown, very slightly siltitic, cryptocrystalline to very fine crystalline, locally fine disseminated pyrite, traces of organic matter and plant fragments, mudstone to scattered wackestone, low relief, tight Calcite Healed Fractures 1-2%: scattered sub-mm to mm fractures and veins system in both limestone types, infill with milky, locally translucent and very light cream, hypidiomorphic microcrystalline to medium and coarse grained equate locally prismatic calcite, clean contacts with the host rock, tight, white uncut fluorescence on 2% of rock, slow very fainted milky white cut, bluish-white fluorescence, Shale traces greenish-grey, non to slightly siltitic, blocky, medium indurated, Siltstone thin stringers, light greenish-grey, lower very fine grained, well sorted, angular to subangular, quartz cement and matrix, tight, no show

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2032.00	37.00							
2080.00	37.00							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas:		26			Background Gas:		29		
Interval (m)		Total Gas	C1	C3	Interval (m)		Total Gas	C1	C3
2143	2145	307	224	83	2156	2157	95	23	72
2146	2148	92	64	28					
2149	2150	76	26	50					

REPORTING DEPTH	2169.0	mMD	**ROTATING HRS:**	10.50	hours
PROGRESS	26.0	meters	**AVERAGE ROP:**	2.48	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1080
VISC(s/l)	43
Ph	10.0
Cl- (mg/l)	13500

HYDRAULICS

RPM	34
WOB(daN)	15
SPP(kPa)	14500
SPM	

BIT RECORD

BIT#	8	9	10	11	12	13
TYPE	SR616M-A2	MSF513M	MSF613	RSR616D-E1	R34ADH	R34APDH
SIZE	216	216	216	216	216	216
DEPTH IN	1443	1711	1807	1986	2026	2143
DEPTH OUT	1711	1807	1986	2026	2143	

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	16-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	25

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING		meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* — **STATUS:** TD well, wipper trip 60m, circulate, trip out of the hole

LAST 24 Hrs:

Interval (m)		2169	2185	ROP min.	2	ROP max.	2.7	ROP Av.	2.3

GEOLOGICAL SUMMARY O&G SHOWS

Limestone 75%:, medium to dark brown, moderate siliceous cryptocrystalline matrix, slightly argillaceous, scattered fine disseminated pyrite locally pyrite nodules, fine disseminated organic matter and plant fragments, non fossiliferous, mudstone, structureless, low relief, tight, Limestone 22%:, cream, mottled cream and light brown, very slightly siltitic, cryptocrystalline to very fine crystalline, locally fine disseminated pyrite, traces of organic matter and plant fragments, mudstone to scattered wackestone, low relief, tight Calcite Healed Fractures 3%: abundant sub-mm to mm fractures and veins system in both limestone types, infill with milky, locally translucent and very light cream, hypidiomorphic microcrystalline to medium and coarse grained equate locally prismatic calcite, clean contacts with the host rock, tight, white uncut fluorescence on 2% of rock, slow very fainted milky white cut, bluish-white fluorescence, Siltstone thin stringers, light greenish-grey, lower very fine grained grading locally to fine grained sandstone, well sorted, angular to subangular, quartz cement and matrix, tight, no show

Interval (m)		2185	2200	ROP min.	1.5	ROP max.	3	ROP Av.	1.9

Limestone 67%:, medium to dark brown, moderate siliceous cryptocrystalline matrix, very slightly argillaceous, scattered fine disseminated pyrite, locally pyrite nodules, fine disseminated organic matter and plant fragments, non fossiliferous, mudstone, structureless, low relief, tight, Limestone 30%:, cream, mottled cream and light brown, very slightly siltitic, cryptocrystalline to very fine crystalline, locally fine disseminated pyrite, traces of organic matter and plant fragments on thin parallel beddings, mudstone to scattered wackestone, low relief, tight Calcite Open Fractures 3%: abundant mm to cm fractures and veins system in both limestone types, infill with milky, locally translucent and very light cream, hypidiomorphic microcrystalline to medium and coarse grained equate locally crystalline and prismatic calcite, locally fibrous calcite, clean contacts with the host rock, fracture porosity in 2185-2190m interval and tight toward bottom, white uncut fluorescence on 2-3% of rock, instant milky white cut, bluish-white fluorescence

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2032.00	37.00							
2080.00	37.00							
2177.00	34.00							

GAS SUMMARY (units) — Background Gas: 25 — Background Gas:

(100units = 1%)

Interval (m)		Total Gas	C1	C3	Interval (m)		Total Gas	C1	C3
2185	2189	79	50	29					

REPORTING DEPTH	2200.0	mMD	ROTATING HRS:	15.00	hours
PROGRESS	31.0	meters	AVERAGE ROP:	2.07	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1110
VISC(s/l)	58
Ph	10.5
Cl- (mg/l)	29000

HYDRAULICS

RPM	37
WOB(daN)	13
SPP(kPa)	12500
SPM	

BIT RECORD

BIT#	8	9	10	11	12	13
TYPE	SR616M-A2	MSF513M	MSF613	RSR616D-E1	R34ADH	R34APDH
SIZE	216	216	216	216	216	216
DEPTH IN	1443	1711	1807	1986	2026	2143
DEPTH OUT	1711	1807	1986	2026	2143	2200

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Adrian Buda P. Geol
403-863-6697
Hopewell Petroleum Ltd

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	17-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	26

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING**		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING**		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** Wireline logging

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Run #1: HRLT / NGS / CAL / GPIT
Run #2: GR / CNL / RHOB / CAL
Run #3: SONIC / FMI / GR

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2180.00	35.04	32.3	1971.95	648.44	-79.56	1.59	514.78	-1933.59
2190.00	34.45	32.4	1980.17	653.26	-76.51	1.78	516.02	-1941.81
2200.00	34.73	32.66	1988.40	658.04	-73.46	0.92	517.25	-1950.04

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3

REPORTING DEPTH	2200.0	mMD	**ROTATING HRS:**		hours
PROGRESS	0.0	meters	**AVERAGE ROP:**		meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1110
VISC(s/l)	58
Ph	10.5
Cl- (mg/l)	29000

HYDRAULICS

RPM	
WOB(daN)	
SPP(kPa)	
SPM	

BIT RECORD

BIT#	8	9	10	11	12	13
TYPE	SR616M-A2	MSF513M	MSF613	RSR616D-E1	R34ADH	R34APDH
SIZE	216	216	216	216	216	216
DEPTH IN	1443	1711	1807	1986	2026	2143
DEPTH OUT	1711	1807	1986	2026	2143	2200

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	*to*	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	18-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	27

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING**		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING**		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** Wireline logging

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Run #3: SONIC / FMI / GR
Run #4: CMR / GR
Run #5: MSCT - Sidewall Cores

Sidewall Cores:					
	1	1259		8	729
	2	1233		9	713.4
	3	1227		10	614
	4	1087		11	593.6
	5	781		12	548.9
	6	757		13	486.1
	7	749		14	333.3

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2200.00	34.73	32.7	1988.40	658.04	-73.46	0.92	517.25	-1950.04

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)	Total Gas	C1	C3	Background Gas: Interval (m)	Total Gas	C1	C3

REPORTING DEPTH	2200.0	mMD	**ROTATING HRS:**		hours
PROGRESS	0.0	meters	**AVERAGE ROP:**		meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1110
VISC(s/l)	58
Ph	10.5
Cl- (mg/l)	29000

HYDRAULICS

RPM	
WOB(daN)	
SPP(kPa)	
SPM	

BIT RECORD

BIT#	8	9	10	11	12	13
TYPE	SR616M-A2	MSF513M	MSF613	RSR616D-E1	R34ADH	R34APDH
SIZE	216	216	216	216	216	216
DEPTH IN	1443	1711	1807	1986	2026	2143
DEPTH OUT	1711	1807	1986	2026	2143	2200

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	19-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	28

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING**		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING**		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** DST Test No 1 - shut-in and build-up pressure

LAST 24 Hrs: Received and studied 14 sidewall cores collected at various depths in 1259-333.3m interval

GEOLOGICAL SUMMARY See attached detailed description

O&G SHOWS

DST Test Open hole interval = 2200-2045m
1 Production 15 min - Gas to surface
Shut-in time = 4 hours
2 Production 1 hour - Gas to surface - flare
Shut-in time = 8 hours

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2200.00	34.73	32.7	1988.40	658.04	-73.46	0.92	517.25	-1950.04

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)	Total Gas	C1	C3	Background Gas: Interval (m)	Total Gas	C1	C3

REPORTING DEPTH	2200.0	mMD	**ROTATING HRS:**		hours
PROGRESS	0.0	meters	**AVERAGE ROP:**		meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1110
VISC(s/l)	58
Ph	10.5
Cl- (mg/l)	29000

HYDRAULICS

RPM	
WOB(daN)	
SPP(kPa)	
SPM	

BIT RECORD

BIT#	8	9	10	11	12	13
TYPE	SR616M-A2	MSF513M	MSF613	RSR616D-E1	R34ADH	R34APDH
SIZE	216	216	216	216	216	216
DEPTH IN	1443	1711	1807	1986	2026	2143
DEPTH OUT	1711	1807	1986	2026	2143	2200

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	20-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	29

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING**		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING**		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** DST Test No 2 - shut-in, building-up pressure

LAST 24 Hrs: GEOLOGICAL SUMMARY

O&G SHOWS

DST Test 2 Open hole interval = 1532-1584m
Flow for 15 min - Air to surface
Shut-in time = 4 hours

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2200.00	34.73	32.7	1988.40	658.04	-73.46	0.92	517.25	-1950.04

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)	Total Gas	C1	C3	Background Gas: Interval (m)	Total Gas	C1	C3

REPORTING DEPTH	2200.0	mMD	**ROTATING HRS:**		hours
PROGRESS	0.0	meters	**AVERAGE ROP:**		meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1110
VISC(s/l)	58
Ph	10.5
Cl- (mg/l)	29000

HYDRAULICS

RPM	
WOB(daN)	
SPP(kPa)	
SPM	

BIT RECORD

BIT#	8	9	10	11	12	13
TYPE	SR616M-A2	MSF513M	MSF613	RSR616D-E1	R34ADH	R34APDH
SIZE	216	216	216	216	216	216
DEPTH IN	1443	1711	1807	1986	2026	2143
DEPTH OUT	1711	1807	1986	2026	2143	2200

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	21-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	30

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING**		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING**		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** Run into hole for wiper trip prior to run casing

LAST 24 Hrs: GEOLOGICAL SUMMARY

O&G SHOWS

DST Test 2 Open hole interval = 1528-1584m
a) Flow for 15 min - Air to surface
Shut-in time = 4.3 hours
b) Flow for 1 hour - Air to surface
Shut-in time = 8 hours

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2200.00	34.73	32.7	1988.40	658.04	-73.46	0.92	517.25	-1950.04

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3

REPORTING DEPTH	2200.0	mMD	**ROTATING HRS:**		hours
PROGRESS	0.0	meters	**AVERAGE ROP:**		meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1110
VISC(s/l)	58
Ph	10.5
Cl- (mg/l)	29000

HYDRAULICS

RPM	
WOB(daN)	
SPP(kPa)	
SPM	

BIT RECORD

BIT#	8	9	10	11	12	13
TYPE	SR616M-A2	MSF513M	MSF613	RSR616D-E1	R34ADH	R34APDH
SIZE	216	216	216	216	216	216
DEPTH IN	1443	1711	1807	1986	2026	2143
DEPTH OUT	1711	1807	1986	2026	2143	2200

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	22-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	31

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING**		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING**		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** Run intermediate casing

LAST 24 Hrs: Run into hole, ream to bottom, circulate and conditioned mud, pull out of hole, prepare and start running intermediate casing

GEOLOGICAL SUMMARY

O&G SHOWS

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2200.00	34.73	32.7	1988.40	658.04	-73.46	0.92	517.25	-1950.04

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)	Total Gas	C1	C3	Background Gas: Interval (m)	Total Gas	C1	C3

REPORTING DEPTH	2200.0	mMD	**ROTATING HRS:**		hours
PROGRESS	0.0	meters	**AVERAGE ROP:**		meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1110
VISC(s/l)	48
Ph	10.0
Cl- (mg/l)	28000

HYDRAULICS

RPM	
WOB(daN)	
SPP(kPa)	
SPM	

BIT RECORD

BIT#	8	9	10	11	12	13
TYPE	SR616M-A2	MSF513M	MSF613	RSR616D-E1	R34ADH	R34APDH
SIZE	216	216	216	216	216	216
DEPTH IN	1443	1711	1807	1986	2026	2143
DEPTH OUT	1711	1807	1986	2026	2143	2200

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	*to*	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	23-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	32

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING**		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING**		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** Running intermediate casing

LAST 24 Hrs:
GEOLOGICAL SUMMARY
O&G SHOWS

Run and circulated intermediate casing up to 1911m

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2200.00	34.73	32.7	1988.40	658.04	-73.46	0.92	517.25	-1950.04

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)	Total Gas	C1	C3	Background Gas: Interval (m)	Total Gas	C1	C3

REPORTING DEPTH	2200.0	mMD	**ROTATING HRS:**		hours
PROGRESS	0.0	meters	**AVERAGE ROP:**		meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1110
VISC(s/l)	48
Ph	10.0
Cl- (mg/l)	28000

HYDRAULICS

RPM	
WOB(daN)	
SPP(kPa)	
SPM	

BIT RECORD

BIT#	8	9	10	11	12	13
TYPE	SR616M-A2	MSF513M	MSF613	RSR616D-E1	R34ADH	R34APDH
SIZE	216	216	216	216	216	216
DEPTH IN	1443	1711	1807	1986	2026	2143
DEPTH OUT	1711	1807	1986	2026	2143	2200

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	24-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	33

GROUND ELEVATION:	33.34	meters	**SURFACE CASING**	212	meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING**	2199	meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING**	-	meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** Cementing the casing

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Run and circulated 177,8mm intermediate casing up to 2199m, wait on cement, start cementing. Cement casing stage #1=2200 - 1496m. Circulate casing and wait on bottom stage cement to cure.

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2200.00	34.73	32.7	1988.40	658.04	-73.46	0.92	517.25	-1950.04

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)	Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3

REPORTING DEPTH	2200.0	mMD	**ROTATING HRS:**		hours
PROGRESS	0.0	meters	**AVERAGE ROP:**		meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1105
VISC(s/l)	48
Ph	10.0
Cl- (mg/l)	27000

HYDRAULICS

RPM	
WOB(daN)	
SPP(kPa)	
SPM	

BIT RECORD

BIT#	8	9	10	11	12	13
TYPE	SR616M-A2	MSF513M	MSF613	RSR616D-E1	R34ADH	R34APDH
SIZE	216	216	216	216	216	216
DEPTH IN	1443	1711	1807	1986	2026	2143
DEPTH OUT	1711	1807	1986	2026	2143	2200

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	25-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	34

GROUND ELEVATION:	33.34	meters	**SURFACE CASING**	212	meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING**	2199	meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING**	-	meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** Waiting on cement

LAST 24 Hrs: Stage #2 cement job from 1496m to surface. Waiting on cement.

GEOLOGICAL SUMMARY

O&G SHOWS

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2200.00	34.73	32.7	1988.40	658.04	-73.46	0.92	517.25	-1950.04

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)	Total Gas	C1	C3	Background Gas: Interval (m)	Total Gas	C1	C3

REPORTING DEPTH	2200.0	mMD	**ROTATING HRS:**		hours
PROGRESS	0.0	meters	**AVERAGE ROP:**		meters per hour

MUD PROPERTIES 06:00

DENS(kg/m^3)	1105
VISC(s/l)	48
Ph	10.0
Cl- (mg/l)	27000

HYDRAULICS

RPM	
WOB(daN)	
SPP(kPa)	
SPM	

BIT RECORD

BIT#	9	10	11	12	13	14
TYPE	MSF513M	MSF613	SR616D-E	R34ADH	R34APDH	
SIZE	216	216	216	216	216	
DEPTH IN	1711	1807	1986	2026	2143	
DEPTH OUT	1807	1986	2026	2143	2200	

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	26-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	35

GROUND ELEVATION:	33.34	meters	**SURFACE CASING**	212	meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING**	2199	meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING**	-	meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** Drilling ahead in the tangent section

LAST 24 Hrs:	**Interval (m)**		**2200**	**2203**	**ROP min.**		**ROP max.**	**2.2**	**ROP Av.**	**5.5**
GEOLOGICAL SUMMARY O&G SHOWS	Limestone 80%: medium to dark brown, moderate siliceous cryptocrystalline matrix, slightly to abundant argillaceous, scattered fine disseminated pyrite, locally pyrite nodules, fine disseminated organic matter and plant fragments, non fossiliferous, mudstone, structureless, low relief, tight, Limestone 18%:, cream and mottled cream and light brown, very slightly siltitic and locally slightly argillaceous, cryptocrystalline to very fine crystalline, mudstone, low relief, tight Calcite Open Fractures 2%: abundant mm to cm fractures and veins system in both limestone types, infill with milky, locally translucent and very light cream, hypidiomorphic microcrystalline to medium and coarse grained equate locally crystalline and prismatic calcite, tight									

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2200.00	34.73	32.7	1988.40	658.04	-73.46	0.92	517.25	-1950.04

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)	Total Gas	C1	C3	Background Gas: Interval (m)	Total Gas	C1	C3
No Gas Shows							

REPORTING DEPTH	2203.0	mMD	**ROTATING HRS:**	1.25	hours
PROGRESS	3.0	meters	**AVERAGE ROP:**	2.40	meters per hour

MUD PROPERTIES 06:00		**HYDRAULICS**		**BIT RECORD**						
DENS(kg/m^3)	1070	RPM	34	BIT#	9	10	11	12	13	14
VISC(s/l)	60	WOB(daN)	11	TYPE	MSF513M	MSF613	RSR616D-E	R34ADH	R34APDH	R30APDH
Ph	11.5	SPP(kPa)	10000	SIZE	216	216	216	216	216	152.4
Cl- (mg/l)	24000	SPM		DEPTH IN	1711	1807	1986	2026	2143	2200
				DEPTH OUT	1807	1986	2026	2143	2200	

FORMATION TOPS:	**PROGNOSIS**		**SAMPLES**			**LOGS**		
	TVD	SUBSEA	TVD	mMD	SUBSEA	TVD	mMD	SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6

CORE #	**LITHOLOGY**	**INTERVAL**			**CUT**	**REC.**	**% REC.**
1		-	*to*	-	-	-	-

Adrian Buda P. Geol
403-863-6697
Hopewell Petroleum Ltd

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	27-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	36

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING** 2199		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING** -		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Indian Cove* **STATUS:** Trip for biit

LAST 24 Hrs:

Interval (m)		2203	2246	ROP min.	2.7	ROP max.	4.8	ROP Av.	3.8

GEOLOGICAL SUMMARY O&G SHOWS

Limestone 95%: medium to dark brown and grey-brown, moderate siliceous cryptocrystalline matrix, slightly dolomitic, slightly to abundant argillaceous, locally abundant fine disseminated pyrite and pyrite nodules, fine disseminated organic matter and plant fragments, non fossiliferous, mudstone, structureless, low relief, tight, interbedded with cream limestone, Calcite Healed / Partially Open Fractures <1%: scattered veins, infill with calcite, white uncut fluorescence on 1% of rock, instant weak milky white cut, bluish-white fluorescence

Interval (m)		2246	2273.6	ROP min.	1.6	ROP max.	5.4	ROP Av.	4.3

Limestone 95%: light to medium brown grading locally to cream and mottled in part cream and brown, moderate siliceous grading to cherty limestone, cryptocrystalline silica matrix with calcite and locally dolomite grains, non to very slightly argillaceous, very scattered pyrite nodules, plant fragments, non fossiliferous, cryptocrystalline to rare microcrystalline, structureless, low relief, tight, with abundant Calcite Healed Fractures and Veins 5%: hear thin to cm infill with calcite, traces of white uncut fluorescence, instant weak milky white cut, bluish-white fluorescence, brecciated limestone on bottom with black shale fragments with slickenside surfaces - fault zone

Interval (m)		2273.6	2282	ROP min.	2.5	ROP max.	3.5	ROP Av.	2.7

Sandstone 98%: off white, translucent to abundant clear and locally frosted quartz 95%, lithic grains 2-4%, traces feldspar, glauconite and jasper traces, occasionally pyrite nodules and scattered in cements, upper medium to upper coarse with elements of very coarse and shredded micro-conglomerate fragments, angular to rare subrounded, poor sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 98% and replacement dolomite 2% and locally pyrite cement, low with scattered medium relief thin layers, poor interparticulate porosity 5% in thin layers, instant slow developing milky white cut, bluish-white fluorescence, Shale 2%: black, blocky, waxy, with slickenside surfaces

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2200.00	34.73	32.7	1988.40	658.04	-73.46	0.92	517.25	-1950.04
2252.00	36.50							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas:		22			Background Gas:		30		
Interval (m)		Total Gas	C1	C3	Interval (m)		Total Gas	C1	C3
2227	2235	51	35	16	2275	2277	76	46	20
2253	2256	72	48	24					
2269	2273	78	53	25					

REPORTING DEPTH	2282.0	mMD	**ROTATING HRS:**	20.00	hours
PROGRESS	79.0	meters	**AVERAGE ROP:**	3.95	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1065
VISC(s/l)	51
Ph	11.0
Cl- (mg/l)	20000

HYDRAULICS

RPM	35
WOB(daN)	13
SPP(kPa)	10900
SPM	

BIT RECORD

BIT#	8	9	10	11	12	13
TYPE	SR616M-A2	MSF513M	MSF613	RSR616D-E1	R34ADH	R34APDH
SIZE	216	216	216	216	216	216
DEPTH IN	1443	1711	1807	1986	2026	2143
DEPTH OUT	1711	1807	1986	2026	2143	2200

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6
Grès de Gaspé (?)	-	-	2048.2	2273.6	-2009.9	2048.2	2273.6	-2009.9

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	28-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	37

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING	2199	meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING	-	meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Shiphead ?* **STATUS:** Run into hole for DST Test

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)		ROP min.	ROP max.	ROP Av.
2282	2297	5.6	16	10.5

Sandstone : off white and very light grey interbedded with light grey, translucent to transparent and frosted quartz 88-94%, white feldspar 2-3%, lithic grains 2-8%, traces glauconite, jasper traces, occasionally pyrite nodules and scattered in cements, lower medium to lower coarse, angular to rare subrounded, well to medium sorted, quartz overgrowth infill pores, quartz cement and matrix 95% and dolomite 5% and scattered pyrite cement, locally thin layers with black organic matter imbedded in sandstone and in adjacent pores, low to scattered medium relief thin layers, poor interparticulate porosity 7-8% in thin layers, instant slow developing milky white cut, bluish-white fluorescence

Interval (m)		ROP min.	ROP max.	ROP Av.
2297	2318	1.1	9.9	3.5

Sandstone : off white, translucent to abundant clear and locally frosted quartz 95%, lithic grains 2%, traces feldspar, traces pyrite nodules, upper fine to upper medium, angular to rare subrounded, moderate sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 97% and replacement dolomite 3% and locally pyrite cement, low with scattered medium relief, loose grains 75-80%, poor to locally fair interparticulate porosity 5-10%, scattered organic matter in pores and coating thin fractures, very weak slow developing milky white cut, bluish-white fluorescence, very thin black Shale stringers

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2200.00	34.73	32.7	1988.40	658.04	-73.46	0.92	517.25	-1950.04
2252.00	36.50							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: 25 — Background Gas:

Interval (m)		Total Gas	C1	C3	Interval (m)		Total Gas	C1	C3
2299	2300	61	40	21					
2305	2310	94	72	22					
2314	2317	110	76	34					

REPORTING DEPTH	2318.0	mMD	ROTATING HRS:	7.50	hours
PROGRESS	36.0	meters	AVERAGE ROP:	4.80	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1060
VISC(s/l)	50
Ph	11.5
Cl- (mg/l)	19500

HYDRAULICS

RPM	33
WOB(daN)	13
SPP(kPa)	11500
SPM	

BIT RECORD

BIT#	10	11	12	13	14	15
TYPE	MSF613	SR616D-E	R34ADH	R34APDH	R30APDH	MS1613
SIZE	216	216	216	216	152.4	152.4
DEPTH IN	1807	1986	2026	2143	2200	2282
DEPTH OUT	1986	2026	2143	2200	2282	2318

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6
Grès de Gaspé (?)	-	-	2048.2	2273.6	-2009.9	2048.2	2273.6	-2009.9

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	29-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	38

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING** 2199		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING** -		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Shiphead ?* **STATUS:** Lay down DST tools

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

DST #3: open hole 2199-2318m

a) Flow for 15 min - Air to surface
Shut-in time = 4.0 hours

b) Flow for 1 hour - Gas to surface recorded with the gas detector - burning flare
Shut-in time = 8 hours

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2200.00	34.73	32.7	1988.40	658.04	-73.46	0.92	517.25	-1950.04
2252.00	36.50							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)	Total Gas	C1	C3	Background Gas: Interval (m)	Total Gas	C1	C3

REPORTING DEPTH	2318.0	mMD	**ROTATING HRS:**		hours
PROGRESS	0.0	meters	**AVERAGE ROP:**		meters per hour

MUD PROPERTIES 06:00

DENS(kg/m^3)	1060
VISC(s/l)	56
Ph	11.0
Cl- (mg/l)	20000

HYDRAULICS

RPM	
WOB(daN)	
SPP(kPa)	
SPM	

BIT RECORD

BIT#	10	11	12	13	14	15
TYPE	MSF613	SR616D-E	R34ADH	R34APDH	R30APDH	MS1613
SIZE	216	216	216	216	152.4	152.4
DEPTH IN	1807	1986	2026	2143	2200	2282
DEPTH OUT	1986	2026	2143	2200	2282	2318

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6
Grès de Gaspé (?)	-	-	2048.2	2273.6	-2009.9	2048.2	2273.6	-2009.9

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	30-nov-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	39

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING	2199	meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING	-	meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Shiphead* **STATUS:** Tripping for bit

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Interval (m)		2318	2330	ROP min.	5.3	ROP max.	14	ROP Av.	9.75

Sandstone 99%: off white, translucent, abundant clear and locally frosted quartz 97%, lithic grains 1%, traces feldspar, traces pyrite nodules lower to upper medium and traces of lower coarse with shredded lower very coarse elements from micro-conglomerate and/or quartz veins, angular to rare subrounded, moderate sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 92% and replacemer dolomite 3% and calcitic cement 5%, low with scattered medium relief, poor to fair interparticulate porosity 5-12%, scattered organic matter in pores and coating thin fractures, weak oil flow over shakers, fainted oil smell, very pale brown locally oil stain, instant milky white cut, straw fluorescence, Shale <1%: black, blocky, slightly abundant dark brown to black organic matter, soft

Interval (m)		2330	2357	ROP min.	3	ROP max.	10.6	ROP Av.	5.3

Sandstone 100%: very light grey, translucent, abundant clear and locally frosted quartz 92-97%, lithic grains 3-8%, traces feldspar, lower to upper medium and traces of lower coarse with shredded lower very coarse elements from micro-conglomerate and/or quartz veins, angular to rare subrounded, moderate sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 92% and replacement dolomite 3% and calcitic cement and fragments from veins 1%, rich in organic matter shale locally infill pores and small fractures, low with scattered medium relief, poor to fair interparticulate porosity, no show

Interval (m)		2357	2367	ROP min.	1	ROP max.	4.6	ROP Av.	2.4

Siltitic Shale 45%: medium grey and grey brown grading to dark brown-dark grey, blocky, slightly to abundant siltitic, medium indurated grading locally to Argillaceous Siltstone 15%, interbedded with medium to dark grey Shale 30%: blocky with abundant hear thin darker layers, rare slickenside surfaces, Cherty Limestone 1-2%: medium brown siliceous mudstone, Lithic Conglomerate 1-2% fragments, Sandstone 5%: light grey, translucent, and frosted quartz 85-90%, lithic grains 10-15%, traces feldspar, lower fine to upper medium and traces of lower coarse with elements from micro-conglomerate, angular to rare subrounded and rounded, moderate to poor sorted, quartz overgrowth, quartz cement and matrix 95% and replacement dolomite 4% and calcitic cement and fragments from veins 1%, tight, no shows

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2200.00	34.73	32.7	1988.40	658.04	-73.46	0.92	517.25	-1950.04
2252.00	36.50							
2360.00	37.00							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas:					Background Gas:			
Interval (m)		Total Gas	C1	C3	Interval (m)	Total Gas	C1	C3
2320	2321	512	314	98				
2322	2330	672	418	254				

REPORTING DEPTH	2367.0	mMD	ROTATING HRS:	9.50	hours
PROGRESS	49.0	meters	AVERAGE ROP:	5.16	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1060
VISC(s/l)	52
Ph	11.0
Cl- (mg/l)	19500

HYDRAULICS

RPM	38
WOB(daN)	9
SPP(kPa)	9700
SPM	

BIT RECORD

BIT#	11	12	13	14	15	16
TYPE	SR616D-E	R34ADH	R34APDH	R30APDH	MS1613	DSR711M-E3
SIZE	216	216	216	152.4	152.4	152.4
DEPTH IN	1986	2026	2143	2200	2282	2318
DEPTH OUT	2026	2143	2200	2282	2318	2367

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6
Grès de Gaspé (?)	-	-	2048.2	2273.6	-2009.9	2048.2	2273.6	-2009.9

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	01-déc-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	40

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING** 2199		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING** -		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Shiphead* **STATUS:** Tripping for bit

LAST 24 Hrs:

Interval (m)		2367	2397	ROP min.	1.8	ROP max.	8.7	ROP Av.	4.45

GEOLOGICAL SUMMARY O&G SHOWS

Sandstone 100%: off white to light grey, clear translucent and frosted quartz 90%, lithic grains 10%, traces feldspar, traces glauconite and reddish quartzite fragments, scattered pyrite, upper fine to upper medium and traces of lower coarse with shredded lower very coarse elements from quartz veins, angular to rare subrounded, moderate to poor sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 90-95% with dolomite 5-8% and subsidiary calcitic cement 2%, occasionally organic material and black bitumen locally carbonaceous shales in very thin lenses and large pores space, low with scattered medium relief, poor to fair interparticulate porosity 3-5% instant fainted milky white cut with locally strong, bluish-white fluorescence

Interval (m)		2397	2400	ROP min.	1.9	ROP max.	5.7	ROP Av.	2.8

Sandstone 75%: off white to light grey, clear translucent and frosted quartz 90%, lithic grains 10%, traces feldspar, traces glauconite and reddish quartzite fragments, scattered pyrite, upper fine to upper medium and traces of lower coarse with shredded lower very coarse elements from quartz veins, angular to rare subrounded, moderate to poor sorted, abundant clear quartz overgrowth infill pores, quartz cement and matrix 90-95% with dolomite 5-8% and subsidiary calcitic cement 2%, occasionally organic material and black bitumen locally carbonaceous shales in very thin lenses and large pores space, low with scattered medium relief, tight, no shows, Quartz Open Fracture 25%: (2399-2400) fracture zone partially infilled with clear and translucent anhedral to euhedral locally pyramidal quartz with light brown oil stain, oil flowing over the shaker, bluish-white uncut fluorescence in unwashed spot sample, oil iridescence in wash water, oil smell, instant streaming milky white cut, bluish-white fluorescence

Interval (m)		2400	2409	ROP min.	0.9	ROP max.	2.5	ROP Av.	1.6

Sandstone 80%: off white to light grey, tight, no shows, interbedded with thin Dolomite 2-5%: light to medium brown, very fine crystalline to cryptocrystalline mudstone, argillaceous in part, grading locally to Calcitic Dolomite, Argillaceous Siltstone 8-10%: medium grey, lower very fine grained with calcite and argillaceous cement, tight, Scattered Siltitic Shale: medium grey, slightly to very siltitic, micromicaceous, medium indurated, and rare green shale thin lenses, Thin light to medium brown cryptocrystalline mudstone Limestone 1-2%

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2252.00	36.50							
2282.00	36.50							
2353.00	37.00							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: 27 **Background Gas:**

Interval (m)		Total Gas	C1	C3	Interval (m)		Total Gas	C1	C3
2399	2400	1384	1064	320					

REPORTING DEPTH	2409.0	mMD	**ROTATING HRS:**	13.25	hours
PROGRESS	42.0	meters	**AVERAGE ROP:**	3.17	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1065
VISC(s/l)	54
Ph	10.0
Cl- (mg/l)	19500

HYDRAULICS

RPM	40
WOB(daN)	9
SPP(kPa)	9800
SPM	

BIT RECORD

BIT#	12	13	14	15	16	17
TYPE	R34ADH	R34APDH	R30APDH	MS1613	DSR711M-E3	DSR908D-B1
SIZE	216	216	152.4	152.4	152.4	152.4
DEPTH IN	2026	2143	2200	2282	2318	2367
DEPTH OUT	2143	2200	2282	2318	2367	2409

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6
Grès de Gaspé (?)	-	-	2048.2	2273.6	-2009.9	2048.2	2273.6	-2009.9

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	DATE	02-déc-09
WELL NAME:	Pétrolia Tar Point N° 1	TIME	24h00
LOCATION:	South Haldimand Fairway - Gaspé	AFE#	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	WELL PERMIT#	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	LICENSE#	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	DAY #	41

GROUND ELEVATION:	33.34	meters	SURFACE CASING	212	meters
KB to GROUND:	5.02	meters	INTERMEDIATE CASING	2199	meters
KB ELEVATION:	38.36	meters	PRODUCTION CASING	-	meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Shiphead* **STATUS:** Run into hole for DST #4

LAST 24 Hrs:

Interval (m)		2409	2431	ROP min.	2.3	ROP max.	12.6	ROP Av.	6.7

GEOLOGICAL SUMMARY O&G SHOWS

Sandstone 100%: off white to light grey and grey-brownish in part, clear translucent and frosted quartz 92%, lithic grains 8%, traces feldspar, traces glauconite, scattered pyrite nodules, micromicaceous in part, upper very fine to upper fine and traces of lower medium, angular to rare subrounded, moderate sorted, abundant clear quartz overgrowth infill pores, dolomite and secondary quartz cement, non to frequent interbeds with abundant organic material - plant fragments - and black bitumen in very thin lenses and pores space, low with scattered medium relief, tight, no shows

Interval (m)		2431	2436	ROP min.	1.5	ROP max.	10	ROP Av.	3.2

Siltitic Shale 50%: medium grey to grey-brownish in part, siltitic grading locally to siltitic shale, micromicaceous, non to scattered slightly dolomitic, blocky, medium indurated, Sandstone 42%: off white to light grey and grey-brownish in part, clear translucent and frosted quartz 92%, lithic grains 8%, traces feldspar, traces glauconite, scattered pyrite nodules, micromicaceous in part, upper very fine to upper fine and traces of lower medium, angular to rare subrounded, moderate sorted, abundant clear quartz overgrowth infill pores, dolomite and secondary quartz cement, non to frequent interbeds with abundant organic material - plant fragments - and black bitumen in very thin lenses and pores space, low with scattered medium relief, tight, no shows, Siltitic Dolomite 8%: light brown, cryptocrystalline to very very fine crystalline mudstone, siltitic, massive, tight, traces of Dolomite Healed Fracture: transparent very light brown euhedral to sub-euhedral dolomite with intercrystalline porosity infilled with organic matter, tight, no shows

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2282.00	36.50							
2353.00	37.00							
2403.00	33.00							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3
No Gas Shows									

REPORTING DEPTH	2434.0	mMD	ROTATING HRS:	5.50	hours
PROGRESS	25.0	meters	AVERAGE ROP:	4.55	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1060
VISC(s/l)	52
Ph	11.0
Cl- (mg/l)	19500

HYDRAULICS

RPM	35
WOB(daN)	10
SPP(kPa)	10600
SPM	

BIT RECORD

BIT#	13	14	15	16	17	18
TYPE	R34APDH	R30APDH	MS1613	DSR711M-E3	DSR908D-B1	MA32YPX
SIZE	216	152.4	152.4	152.4	152.4	152.4
DEPTH IN	2143	2200	2282	2318	2367	2409
DEPTH OUT	2200	2282	2318	2367	2409	2434

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6
Grès de Gaspé (?)	-	-	2048.2	2273.6	-2009.9	2048.2	2273.6	-2009.9

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	03-déc-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	42

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING** 2199		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING** -		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Shiphead* **STATUS:** Run into hole for DST #5

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

DST #4: open hole 2395-2405m

a) Flow for 15 min - weak air bubble to surface
Shut-in time = 4.0 hours

b) Flow for 1 hour - weak air flow to surface
Shut-in time = 4 hours

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2306.00	37.00							
2353.00	37.00							
2403.00	33.00							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)	Total Gas	C1	C3	Background Gas: Interval (m)	Total Gas	C1	C3
No gas to surface							

REPORTING DEPTH	2434.0	mMD	**ROTATING HRS:**		hours
PROGRESS	0.0	meters	**AVERAGE ROP:**		meters per hour

MUD PROPERTIES 06:00

DENS(kg/m^3)	1060
VISC(s/l)	52
Ph	11.0
Cl- (mg/l)	19500

HYDRAULICS

RPM	
WOB(daN)	
SPP(kPa)	
SPM	

BIT RECORD

BIT#	13	14	15	16	17	18
TYPE	R34APDH	R30APDH	MS1613	DSR711M-E3	DSR908D-B1	MA32YPX
SIZE	216	152.4	152.4	152.4	152.4	152.4
DEPTH IN	2143	2200	2282	2318	2367	2409
DEPTH OUT	2200	2282	2318	2367	2409	2434

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6
Grès de Gaspé (?)	-	-	2048.2	2273.6	-2009.9	2048.2	2273.6	-2009.9

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	04-déc-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	43

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING** 2199		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING** -		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Shiphead* **STATUS:** Run into hole for wiper trip prior to logging

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

DST #5: open hole 2312-2334m

a) Flow for 15 min - weak air bubble to surface
Shut-in time = 4.0 hours

b) Flow for 1 hour - no bubble to surface
Shut-in time = 4 hours

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2306.00	37.00							
2353.00	37.00							
2403.00	33.00							

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3
No gas to surface									

REPORTING DEPTH	2434.0	mMD	**ROTATING HRS:**		hours
PROGRESS	0.0	meters	**AVERAGE ROP:**		meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1065
VISC(s/l)	48
Ph	10.5
Cl- (mg/l)	19000

HYDRAULICS

RPM	
WOB(daN)	
SPP(kPa)	
SPM	

BIT RECORD

BIT#	13	14	15	16	17	18
TYPE	R34APDH	R30APDH	MS1613	DSR711M-E3	DSR908D-B1	MA32YPX
SIZE	216	152.4	152.4	152.4	152.4	152.4
DEPTH IN	2143	2200	2282	2318	2367	2409
DEPTH OUT	2200	2282	2318	2367	2409	2434

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6
Grès de Gaspé (?)	-	-	2048.2	2273.6	-2009.9	2048.2	2273.6	-2009.9
TD	-	-	2178.8	2434.0	-2140.5	2178.8	2434.0	-2140.5

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	*to*	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	05-déc-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	44

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING** 2199		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING** -		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Shiphead* **STATUS:** Wireline logging

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Wireline logging

Run #1 PEX HRLA-GR-RHOB-CNL-NGS-CAL-SP FROM 2434-2200m
Run #2 FMI-SONIC
Run #3 MSVC (Recovered 11 samples from 1419.5-1219.5m interval)
Run #4 CBL-VDL-GR in progress

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2420.00	32.86	32.9	2167.09	765.37	-3.34	1.15	765.37	-2128.73
2430.00	33.04	32.5	2175.48	769.95	-0.40	0.80	769.95	-2137.12
2434.00	33.04	32.51	2178.83	771.79	0.77	0.00	771.79	-2140.47

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)	Total Gas	C1	C3	Background Gas: Interval (m)	Total Gas	C1	C3

REPORTING DEPTH	2434.0	mMD	**ROTATING HRS:**	hours
PROGRESS	0.0	meters	**AVERAGE ROP:**	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m^3)	1065
VISC(s/l)	48
Ph	10.5
Cl- (mg/l)	19000

HYDRAULICS

RPM	
WOB(daN)	
SPP(kPa)	
SPM	

BIT RECORD

BIT#	13	14	15	16	17	18
TYPE	R34APDH	R30APDH	MS1613	DSR711M-E3	DSR908D-B1	MA32YPX
SIZE	216	152.4	152.4	152.4	152.4	152.4
DEPTH IN	2143	2200	2282	2318	2367	2409
DEPTH OUT	2200	2282	2318	2367	2409	2434

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6
Grès de Gaspé (?)	-	-	2048.2	2273.6	-2009.9	2048.2	2273.6	-2009.9
TD	-	-	2178.8	2434.0	-2140.5	2178.8	2434.0	-2140.5

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	*to*	-	-	-	-

Daily Geological Report

REPORTED TO:	Jean-Louis Teurlai		
COMPANY:	Pétrolia Inc.	**DATE**	06-déc-09
WELL NAME:	Pétrolia Tar Point N° 1	**TIME**	24h00
LOCATION:	South Haldimand Fairway - Gaspé	**AFE#**	53904
GEO COORDINATES	48° 43' 28.25", 64° 18' 28.51"	**WELL PERMIT#**	2005RS123
SPUD DATE:	Oct 23, 2009 @ 12:15 AM	**LICENSE#**	2009FC135
REPORTED FROM:	Adrian Buda P. Geol	**DAY #**	45

GROUND ELEVATION:	33.34	meters	**SURFACE CASING** 212		meters
KB to GROUND:	5.02	meters	**INTERMEDIATE CASING** 2199		meters
KB ELEVATION:	38.36	meters	**PRODUCTION CASING** -		meters
UTM COORDINATES:	5397657	mN	403810	mE	

FORMATION @ 24h00 *Shiphead* **STATUS:** Run retrievable bridge plug

LAST 24 Hrs: GEOLOGICAL SUMMARY O&G SHOWS

Studied 12 sidewall cores - see attached description

Final AM Geological Report

LAST AVAILABLE HARD SURVEYS

Survey Depth	Inclination Degrees	Azimuth Degrees	True Vert. Depth	Rect. Coordinates N/-S	Rect. Coordinates E/-W	Dog Leg	Vert Sect	Sub Sea Depth
2420.00	32.86	32.9	2167.09	765.37	-3.34	1.15	765.37	-2128.73
2430.00	33.04	32.5	2175.48	769.95	-0.40	0.80	769.95	-2137.12
2434.00	33.04	32.51	2178.83	771.79	0.77	0.00	771.79	-2140.47

GAS SUMMARY (units) *(100units = 1%)*

Background Gas: Interval (m)		Total Gas	C1	C3	Background Gas: Interval (m)		Total Gas	C1	C3

REPORTING DEPTH	2434.0	mMD	**ROTATING HRS:**	hours
PROGRESS	0.0	meters	**AVERAGE ROP:**	meters per hour

MUD PROPERTIES 06:00

DENS(kg/m³)	1065
VISC(s/l)	48
Ph	10.5
Cl- (mg/l)	19000

HYDRAULICS

RPM	
WOB(daN)	
SPP(kPa)	
SPM	

BIT RECORD

BIT#	13	14	15	16	17	18
TYPE	R34APDH	R30APDH	MS1613	DSR711M-E3	DSR908D-B1	MA32YPX
SIZE	216	152.4	152.4	152.4	152.4	152.4
DEPTH IN	2143	2200	2282	2318	2367	2409
DEPTH OUT	2200	2282	2318	2367	2409	2434

FORMATION TOPS:

	PROGNOSIS TVD	PROGNOSIS SUBSEA	SAMPLES TVD	SAMPLES mMD	SAMPLES SUBSEA	LOGS TVD	LOGS mMD	LOGS SUBSEA
Battery Point Fm - Petit Gaspe Mbr	5.0	33.3	5.0	5.0	33.4	5.0	5.0	33.4
York River	-28.3	66.7	129.0	129.0	-90.6	129.0	129.0	-90.6
Indian Cove	-	-	1682.0	1794.0	-1643.6	1682.0	1794.0	-1643.6
Grès de Gaspé (?)	-	-	2048.2	2273.6	-2009.9	2048.2	2273.6	-2009.9
TD	-	-	2178.8	2434.0	-2140.5	2178.8	2434.0	-2140.5

CORE #	LITHOLOGY	INTERVAL			CUT	REC.	% REC.
1		-	to	-	-	-	-

ANNEXE 5

RAPPORTS DES TESTS

HOLLAND TESTERS LTD.

R.R. #3 Wheatley, Ontario N0P 2P0 1-519-825-3680

Customer: Petrolia Inc. | Customer Rep.: Mr. Marcel Yurchak

Location: Petrolia - Tar Point #1

Interval: 2045-2200m | Total Depth: 2200.00m | Formation: Indian Cove

Test Number: one | Tester: Derrick Holland

Test Type: Dual bottom hole | K. B. Elevation: 38.36 | Ground Elevation: 33.34

Test Date: November 19, 2009 | Bottom Hole Temperature (C): 32.5

RECOVERY		SAMPLED AT	
50.2	Metres Total Fluid	Sampler # 005 ; #	
50.2	Metres of Slightly oil cut / drilling		
	Metres of 5% mud	40.14	Metres
	Metres of (Bottom hole sampler had oil 48API and	21.4	Metres
	Metres of gas)	2.74	Metres
	Metres of (Fluid recovery vol = 177 L)		Metres
		BHS	Above Tool

REMARKS: Preflow had weak inital puff, bottom of pail in 3 min. increasing throughout. On valve open, had strong inital puff, bottom of pail in 5 sec. decreasing to faint after 20 min. gas to surface in 20 min.

GAS READINGS

TIME min.	PRESS kPa	TEMP C	ORIFICE mm	RATE m3/d	TIME min	PRESS kPa	TEMP C	ORIFICE mm	RATE m3/d
20	5	-4	3.175	48.2					
30	8.96	-4	3.175	65.4					
40	12.45	-4	3.175	77.8					
50	14.94	-4	3.175	85.6					
60	17.2	-4	3.175	125					

Gas Samples: # 12772 ; # 17885 ; Sent to Agat Labs, Calgary

Gas Measured by: Floor manifold c/w positive choke

DOWNHOLE PRESSURE DATA (KPAG) Test Times: PF 15 ISN 240 VO 60 FSN 480

Recorder Number		11078	13380		76584	75244	
Recorder Range KPag		38951	39474		41370	41370	
Clock Hour - Emp		24	24		EMP	EMP	
Depth - Metres		2031.33	2039.27		2049.47	2049.97	
Position of Pressure Port		FLUID	INSIDE	INSIDE	OUTSIDE	OUTSIDE	OUTSIDE
Initial Hydrostatic	(A)		20399		20169	20181	
Start First Flow	(B)	530	572		361	362	
End First Flow	(B1)	539	346		401	383	
First Shut-In	(C)	539	14703		14641	14648	
Start Second flow	(D)	801	632		471	471	
End Second flow	(E)	743	572		577	578	
Second Shut-In	(F	627	14743		14630	14637	
Start Third Flow	(H)						
End Third Flow	(I)						
Third Shut-In	(J)						
Final Hydroststic	(G				20057	20068	

TEST IS: Misrun: Satisfactory Satisfactory

Started in hole @ 0900 Hr. | Opened tool @ 1654 Hr. | Out of hole @ 1430 Hr.

DP size (mm) 101.6 | Weight (kg/m) 23.35 | Main hole size (mm) 215.9

DP length (m) 1810.1 m HWDP | size ID (mm) 67 mm HWDP | above tool (m) 224.7

Mud weight (kg/m3) 1110 | Visc (s/L) 58 | Water loss (cm3) 8

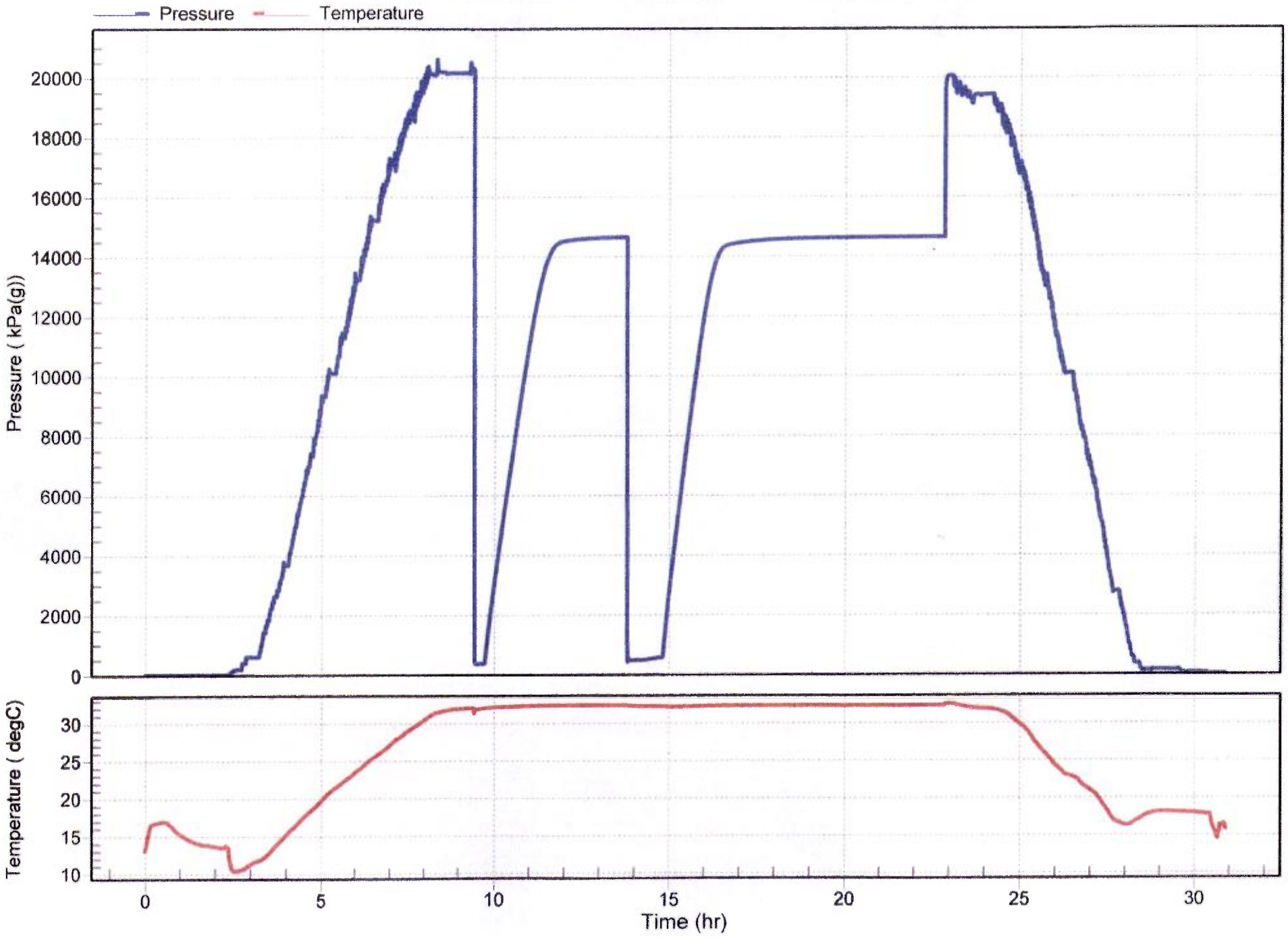
PACKER RUBBER SIZE (MM) 196.85 | BOTTOM HOLE COKE (MM) 19.05

TOOL TALLY

PO Sub	.915
DP / XOver	.305
Recorder	1.524
Shut-in	1.650
Sampler	.914
Sampler	
Hydraulic	1.720
Jars	2.130
M/Record	1.524
E/Record	
Temp Rec	
By-pass	
Safety Jt	.660
Packer	2.340
Packer	1.524
Upper Packer depth	2045.0
Packer	.305
Perfs	3.353
By-pass	
M / Record	
E / Record	.305
X Over	.305
DP / DC	
X Over	
Blank	
Packer	
Lower Packer depth	
Packer	
Packer	
Perfs	
Recorder	
X Over	
DP / DC	149.810
X Over	.305
Bullnose	.609
Total depth	2200.00
Total Interval	155.00
Total Tail Pipe	155.00
Tool Make up Time	1.5 Hr

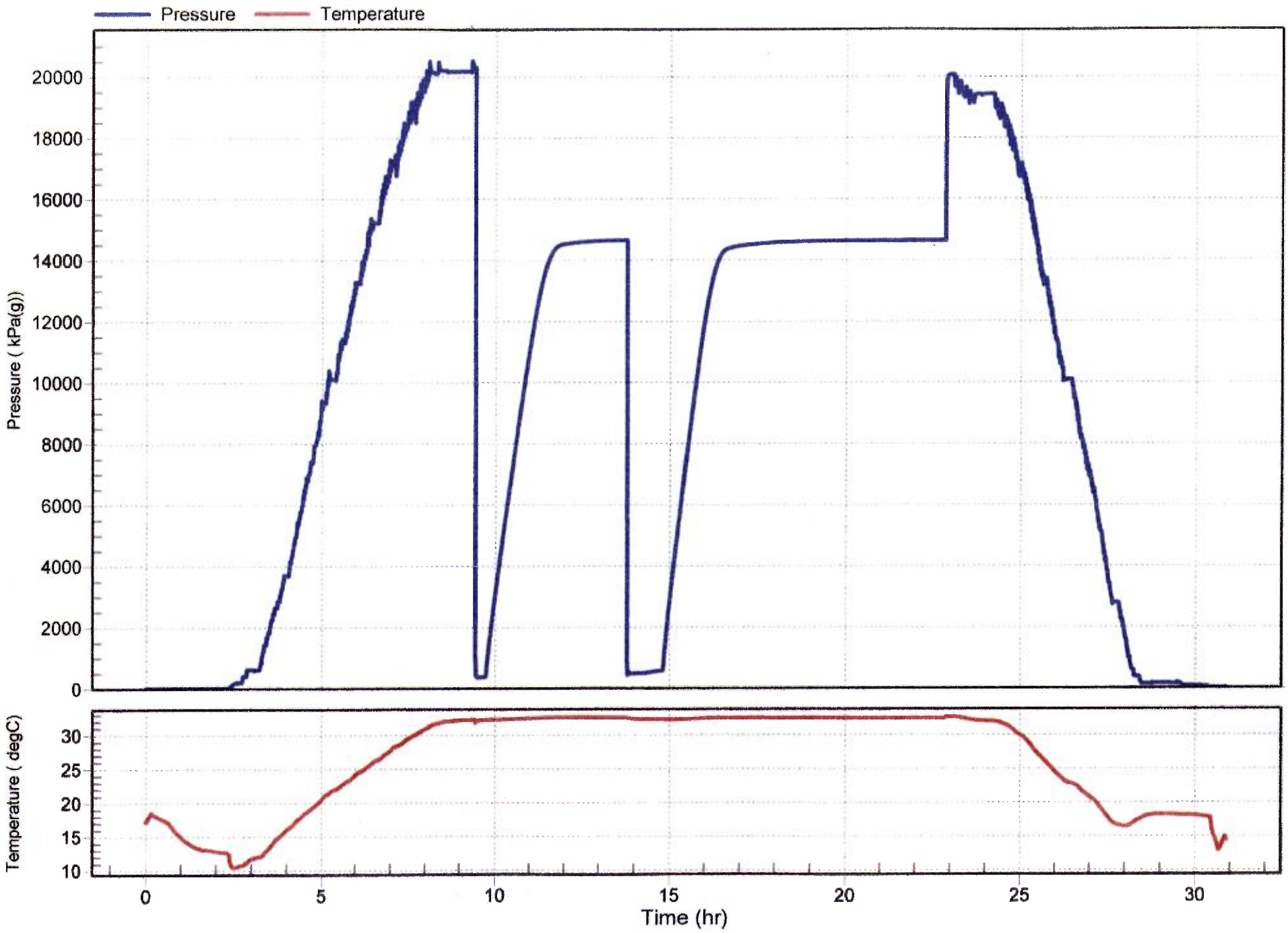
PETROLIA INC.

PETROLIA TAR- POINT #1 DST # ONE RECORDER # 76584



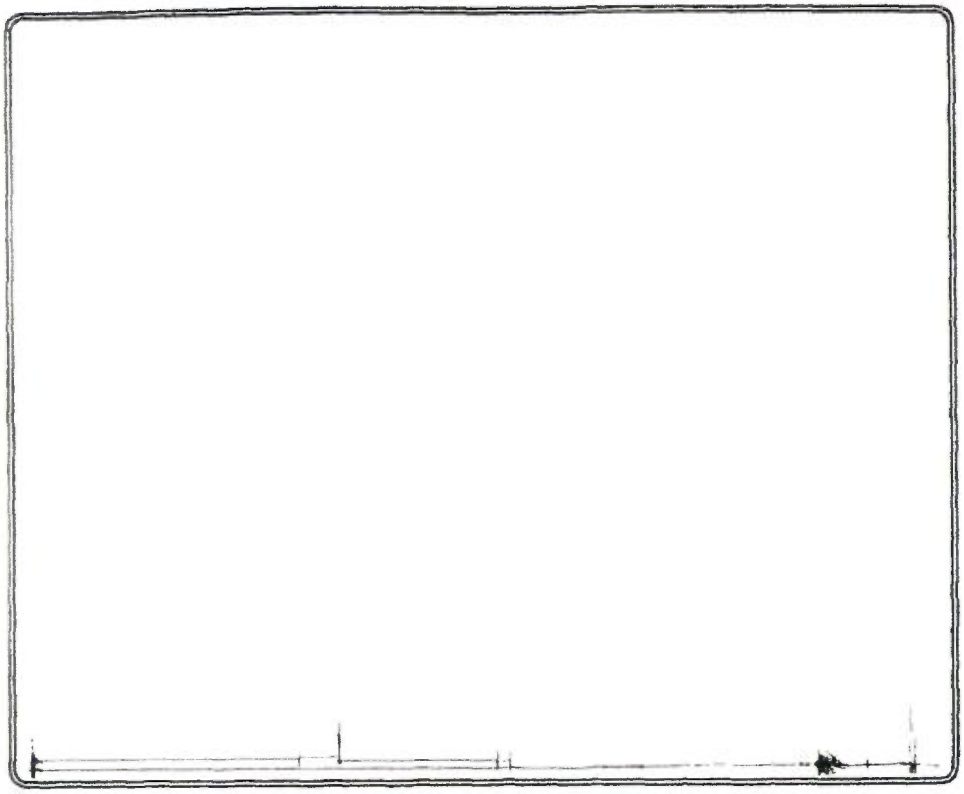
PETROLIA INC.

PETROLIA TAR- POINT #1 DST # ONE RECORDER # 75244

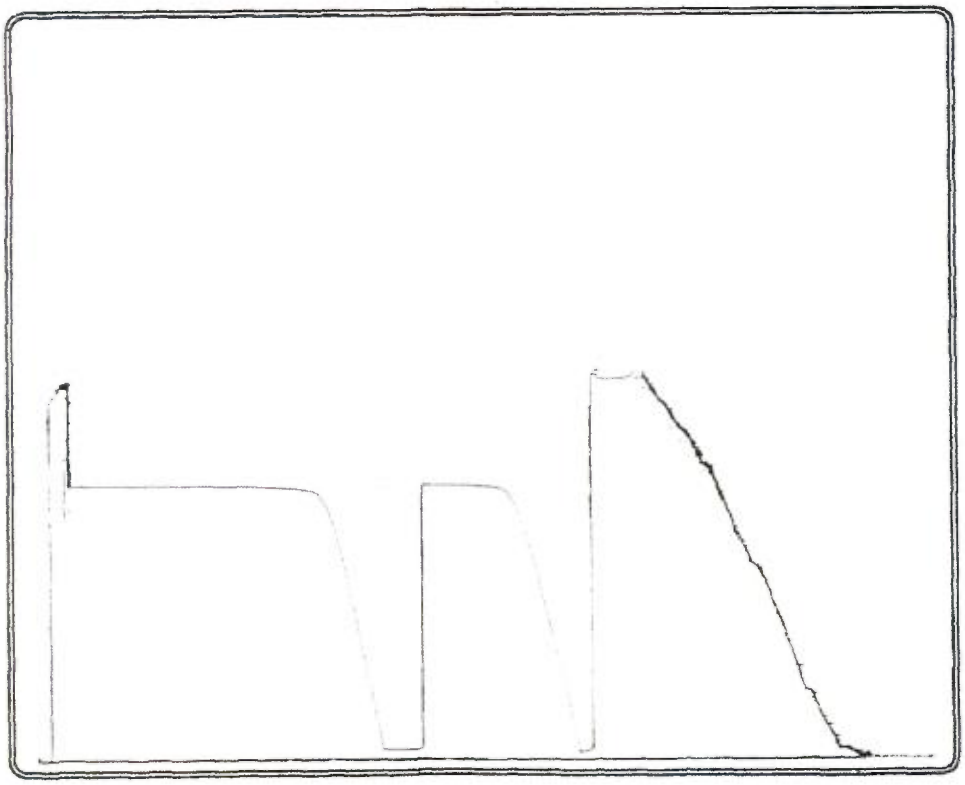


DRILL-STEM-TEST CHARTS

Well Location: PETROLIA TAR - POINT #1



Recorder No.	11078
Recorder Depth	2031.3
DST Number	ONE
Pressure Units	kPag
Initial Hydro.	
Initial Preflow	530
Final Preflow	539
1st Final Shut-in	539
1st Initial Flow	801
1st Final Flow	743
2nd Final Shut-in	627
Final Hydro.	



Recorder No.	13380
Recorder Depth	2039.27
DST Number	ONE
Pressure Units	kPag
Initial Hydro.	20399
Initial Preflow	572
Final Preflow	346
1st Final Shut-in	14703
1st Initial Flow	632
1st Final Flow	572
2nd Final Shut-in	14743
Final Hydro.	

HOLLAND TESTERS LTD.

R.R. #3 Wheatley, Ontario N0P 2P0 1-519-825-3680

Customer: Petrolia Inc. | Customer Rep.: Mr. Marcel Yurchak
Location: Petrolia - Tar Point #1
Interval: 1527.9-1584.3 | Total Depth: 2200m | Formation: York River
Test Number: two | Tester: Derrick Holland
Test Type: Dual straddle | K. B. Elevation: 38.36 | Ground Elevation: 33.34
Test Date: November 20, 2009 | Bottom Hole Temperature (C): 27.6

RECOVERY: 58.33
58.33 Metres Total Fluid
Metres of Drilling mud
Metres of
Metres of (Bottom hole sampler had gas and mud)
Metres of (Fluid recovery vol = 205 L)
Metres of

Sampler # 005 ; #

SAMPLED AT:

58	Metres
39.3	Metres
20.6	Metres
1.9	Metres
BHS	Above Tool

REMARKS: Open for preflow, had weak inital puff, bottom of pail in 1 min. Open for valve open, had weak inital puff, bottom of pail in 5 min. decreasing to 3/4 in pail in 30 min. no gas to surface.

GAS READINGS

TIME min.	PRESS kPa	TEMP C	ORIFICE mm	RATE m3/d	TIME min	PRESS kPa	TEMP C	ORIFICE mm	RATE m3/d

Gas Samples: # 40029 ; # 17966 ; Sent to Agat Labs, Calgary
Gas Measured by: Took gas samples from BHS

TOOL TALLY

PO Sub	.305
DP / XOver	.305
Recorder	1.524
Shut-in	1.650
Sampler	.914
Sampler	
Hydraulic	1.720
Jars	2.130
M/Record	1.524
E/Record	
Temp Rec	
By-pass	
Safety Jt	.660
Packer	2.340
Packer	1.524
Upper Packer depth	1527.983

DOWNHOLE PRESSURE DATA (KPAG) Test Times: PF 15 ISN 274 VO 60 FSN 480

Recorder Number		13791	11078		76584	75244	13380
Recorder Range		35854	38951		41370	41370	39474
Clock Hour -Emp		24	24		FMP	FMP	24
Depth - Metres		1514.3	1522.24		1534.88	1535.38	1587.89
Position of Pressure Port		FLUID	INSIDE	INSIDE	OUTSIDE	OUTSIDE	OUTSIDE
Initial Hydrostatic	(A)		16033		15970	16179	15807
Start First Flow	(B)	668	898		693	701	4455
End First Flow	(B1)		724		713	713	
First Shut-In	(C)	641	1248		1344	1343	6948
Start Second flow	(D)	820	1190		1637		6406
End Second flow	(E)	713	1326		1347		5884
Second Shut-In	(F	713	2733		2782	2767	7786
Start Third Flow	(H)						
End Third Flow	(I)						
Third Shut-In	(J)						
Final Hydroststic	(G		15800		15889	15900	16477

Packer	.305		
Perfs	5.791		
By-pass			
M / Record			
E / Record	.305		
X Over	.305		
DP / DC	48.120		
X Over	.305		
Blank	.305		
Packer	.915		
Lower Packer depth	1584.354		
Packer	.915		
Packer	2.340		
Perfs	1.524		
Recorder	1.524		
X Over	.305		
DP / DC	606.62		
X Over	.305		
Bullnose	2.133		
Total depth	2200.00		

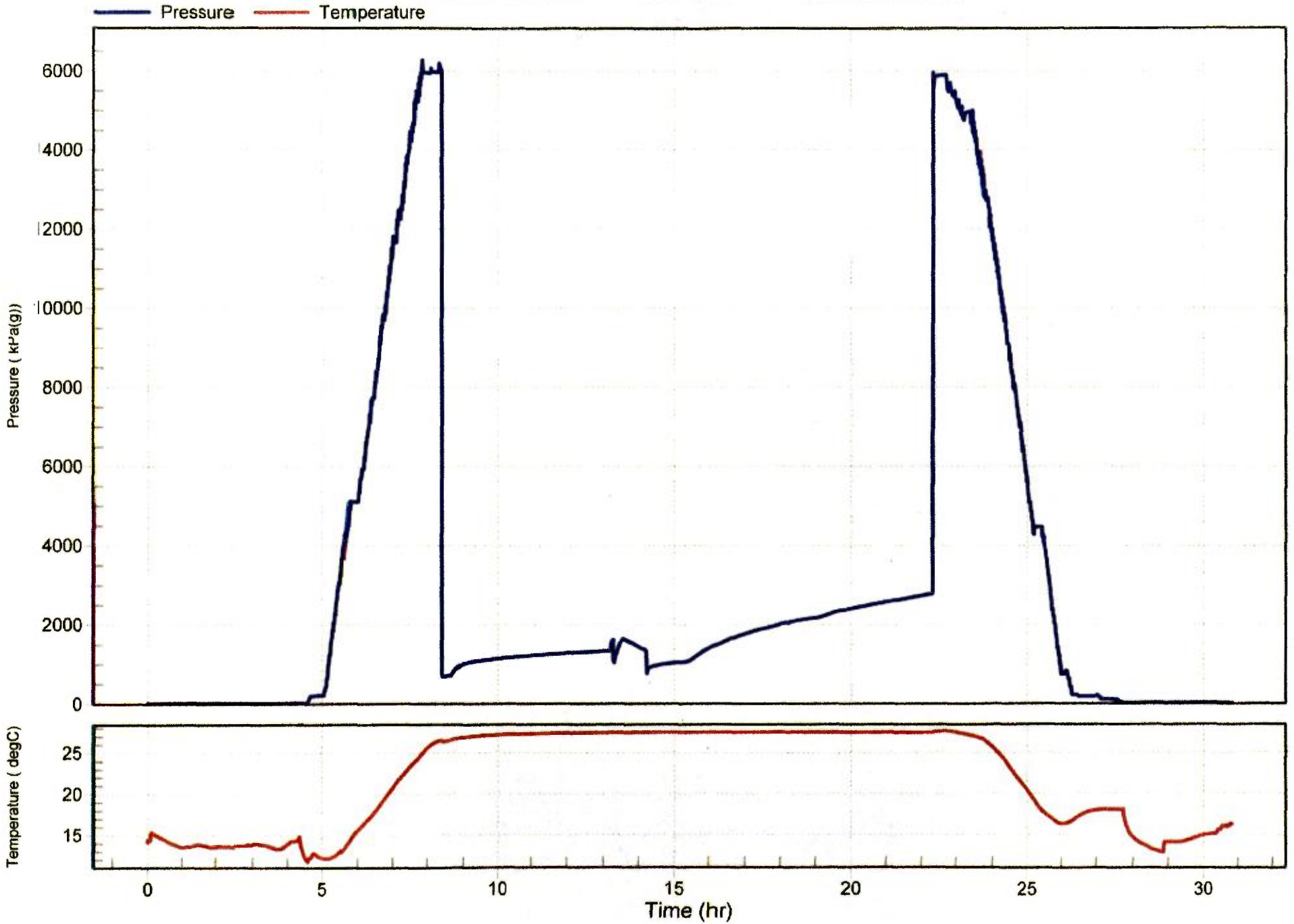
TEST IS: Misrun; Satisfactory Satisfactory

Started in hole @ 1900 Hr. | Opened tool @ 1106 Hr. | Out of hole @ 1900 Hr.
DP size (mm) 101.6 | Weight (kg/m) 23.35 | Main hole size (mm) 215.9
DP length (m) 1144.8 HWDP | size ID (mm) 67mm HWDP | above tool (m) 374.5
Mud weight (kg/m3) 1110 | Visc (s/L) 58 | Water loss (cm3) 8
PACKER RUBBER SIZE (MM) 196.85 | BOTTOM HOLE COKE (MM) 19.05

Total Interval	56.351
Total Tail Pipe	615.666
Tool Make up Time	3 Hr

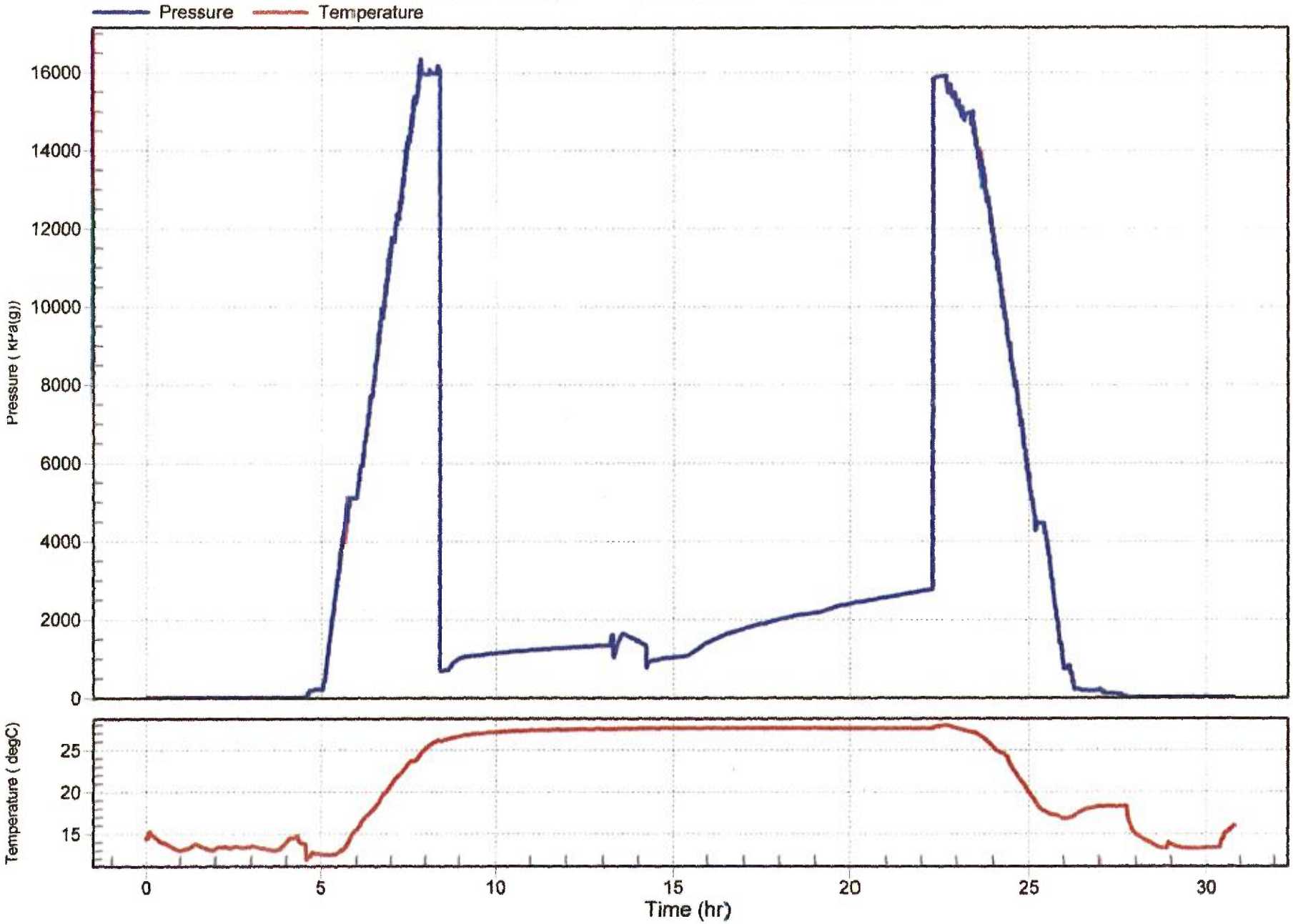
PETROLIA INC.

PETROLIA TAR- POINT #1 DST # TWO RECORDER # 76584



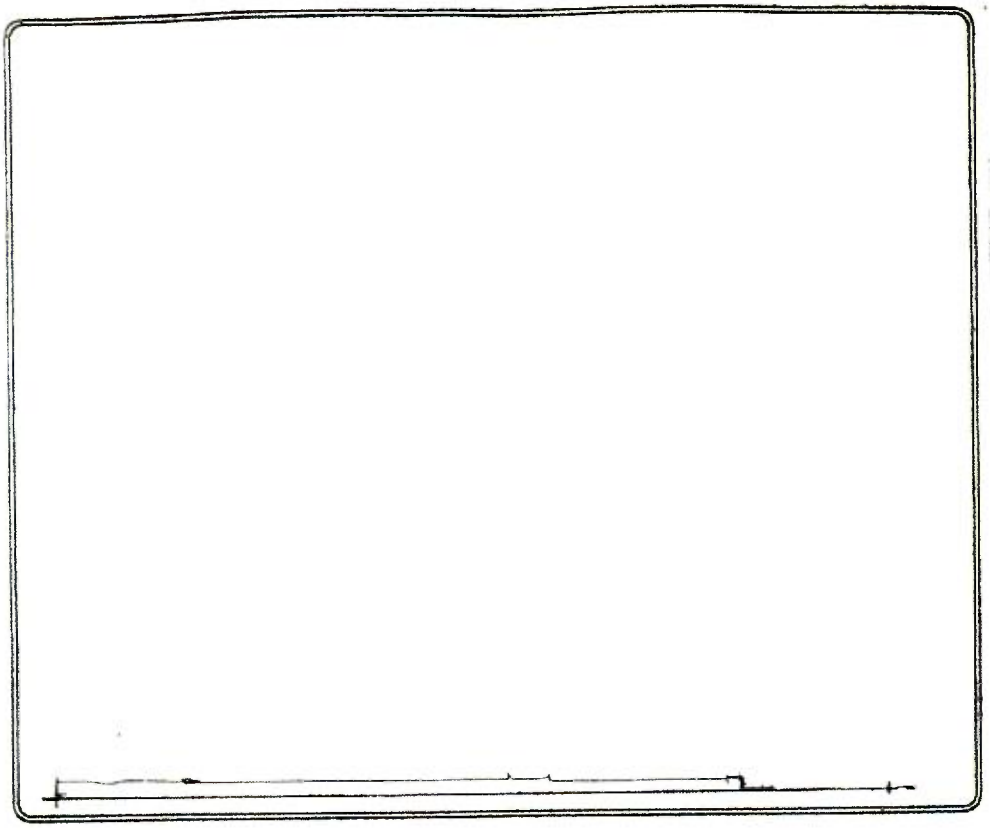
PETROLIA INC.

PETROLIA TAR- POINT #1 DST # TWO RECORDER # 75244

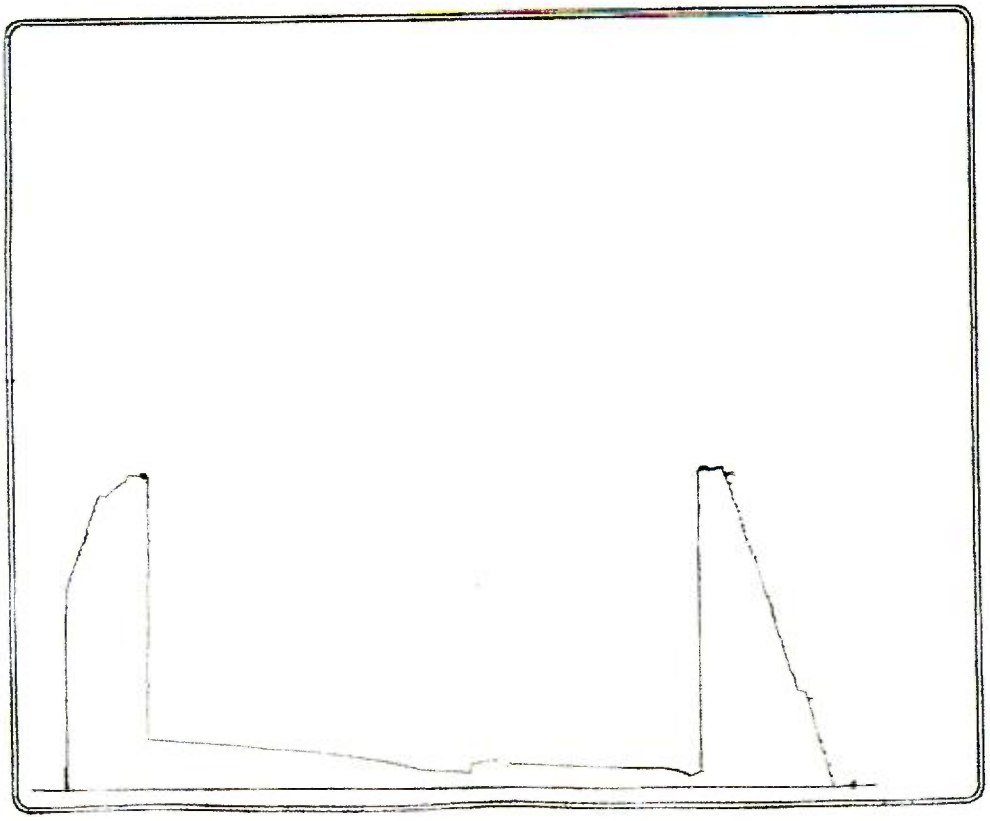


DRILL STEM TEST CHARTS

WELL LOCATION : PETROLIA TAR - POINT # 1



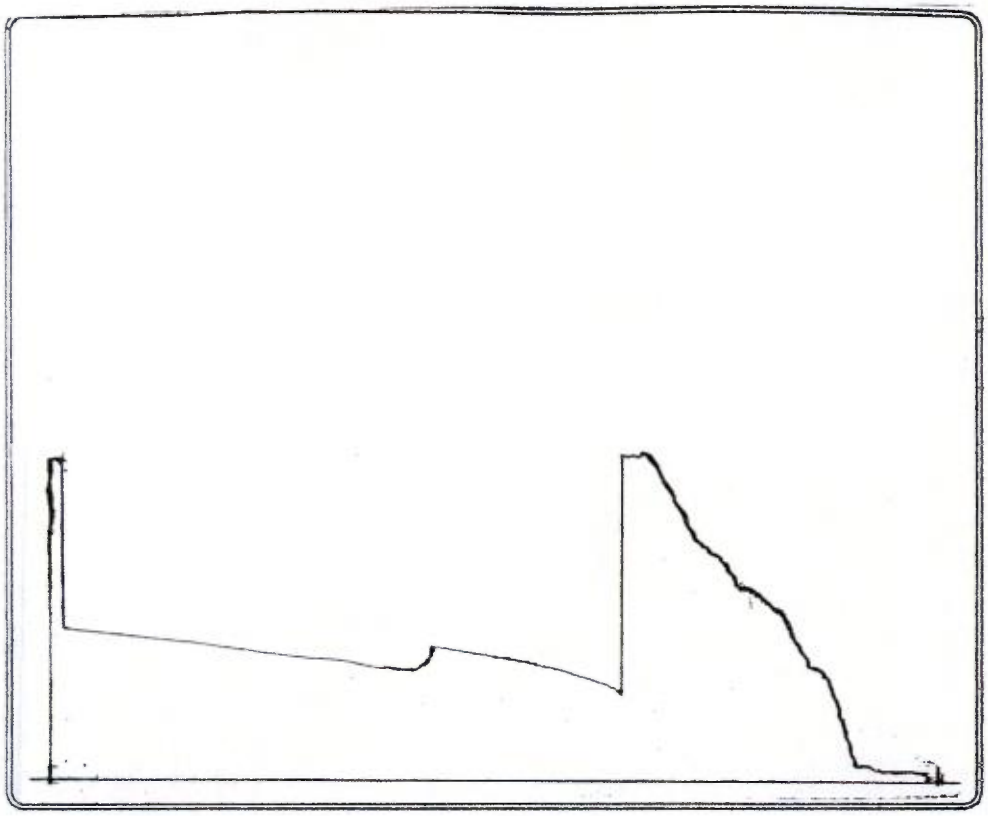
Recorder No.	13791
Recorder Depth	1514.3
DST Number	TWO
Pressure Units	kPag
Initial Hydro.	
Initial Preflow	668
Final Preflow	
1st Final Shut-in	641
1st Initial Flow	820
1st Final Flow	713
2nd Final Shut-in	713
Final Hydro.	



Recorder No.	11078
Recorder Depth	1522.24
DST Number	TWO
Pressure Units	kPag
Initial Hydro.	16033
Initial Preflow	898
Final Preflow	724
1st Final Shut-in	1248
1st Initial Flow	1190
1st Final Flow	1326
2nd Final Shut-in	2733
Final Hydro.	15800

DRILL STEM TEST CHARTS

WELL LOCATION : PETROLIA TAR - POINT # 1



Recorder No.	13380
Recorder Depth	1587.9
DST Number	TWO
Pressure Units	kPag
Initial Hydro.	15807
Initial Preflow	4455
Final Preflow	
1st Final Shut-in	6948
1st Initial Flow	6406
1st Final Flow	5884
2nd Final Shut-in	7786
Final Hydro.	16477

Recorder No.	
Recorder Depth	
DST Number	
Pressure Units	
Initial Hydro.	
Initial Preflow	
Final Preflow	
1st Final Shut-in	
1st Initial Flow	
1st Final Flow	
2nd Final Shut-in	
Final Hydro.	

HOLLAND TESTERS LTD.

R.R. #3 Wheatley, Ontario N0P 2P0 1-519-825-3680

Customer: Petrolia Inc. | Customer Rep.: Mr. Marcel Yurchak

Location: Petrolia - Tar Point #1

Interval: 2194-2318.2 | Total Depth: 2318.2 | Formation: Indian Cove

Test Number: three | Tester: Derrick Holland

Test Type: Single bottom hole | K. B. Elevation: 38.36 | Ground Elevation: 33.34

Test Date: November 28, 2009 | Bottom Hole Temperature (C): 33.58

RECOVERY: 23.8

23.8

Vol = 84 L

Metres Total Fluid

Metres of: Drilling mud / oil trace

Metres of

Metres of

Metres of

Metres of: No fluid in BHS

Sampler #: 005 ; #

SAMPLED AT:

20.83 Metres

11.48 Metres

2.134 Metres

Metres Above Tool

REMARKS: Preflow had strong inital puff bottom of pail in 20 sec. slowly decreasing throughout, no gas to surface. Had to close shut-in tool ½ turn after 24 min. On valve open, had very fair inital puff, bottom of pail in 10 sec. gas to surface in 2 min. decreasing to faint.

GAS READINGS

TIME min.	PRESS kPa	TEMP C	ORIFICE mm	RATE m3/d	TIME min	PRESS kPa	TEMP C	ORIFICE mm	RATE m3/d
10	.75	-4	3.175	18.5					
20	.75	-4	3.175	18.5					
30	.50	-4	3.175	15.1					
40	.25	-4	3.175	10.7					
50	.25	-4	3.175	10.7					
60	.25	-4	3.175	10.7					

Gas Samples: #04000286; #05003058; Sent to Agat Labs, Calgary

Gas Measured by: Floor manifold, positive choke

DOWNHOLE PRESSURE DATA (KPAG)

Test Times: PF 15 ISN 240 VO 60 FSN 480

Recorder Number		11078	13380		76584	75244	
Recorder Range		38951	39474		41370	41370	
Clock Hour -Emp		24	24		EMP	EMP	
Depth - Metres		2182.17	2187.98		2201.84	2202.34	
Position of Pressure Port		FLUID	INSIDE	INSIDE	OUTSIDE	OUTSIDE	OUTSIDE
Initial Hydrostatic	(A)		20862		20826	20831	
Start First Flow	(B)	578	385		399	402	
End First Flow	(B1)	539	267		387	361	
First Shut-In	(C)	510	1430		1549	1541	
Start Second flow	(D)	510	375		317	321	
End Second flow	(E)	423	267		801	798	
Second Shut-In	(F	345	691				
Start Third Flow	(H)						
End Third Flow	(I)						
Third Shut-In	(J)						
Final Hydroststic	(G		20498		20650	20686	

TEST IS: ____ Misrun: Satisfactory Satisfactory

Started in hole @ 2300 Hr. | Opened tool @ 0329 Hr. | Out of hole @ 2300 Hr.

DP size (mm) 101.6 mm | Weight (kg/m) 23.35 | Main hole size (mm) 152.4

DP length (m) 1807.72m HWDP | ID (mm) 67mm HWDP | above tool (m) 374.53m

Mud weight (kg/m3) 1060 | Visc (s/L) 55 | Water loss (cm3) 10

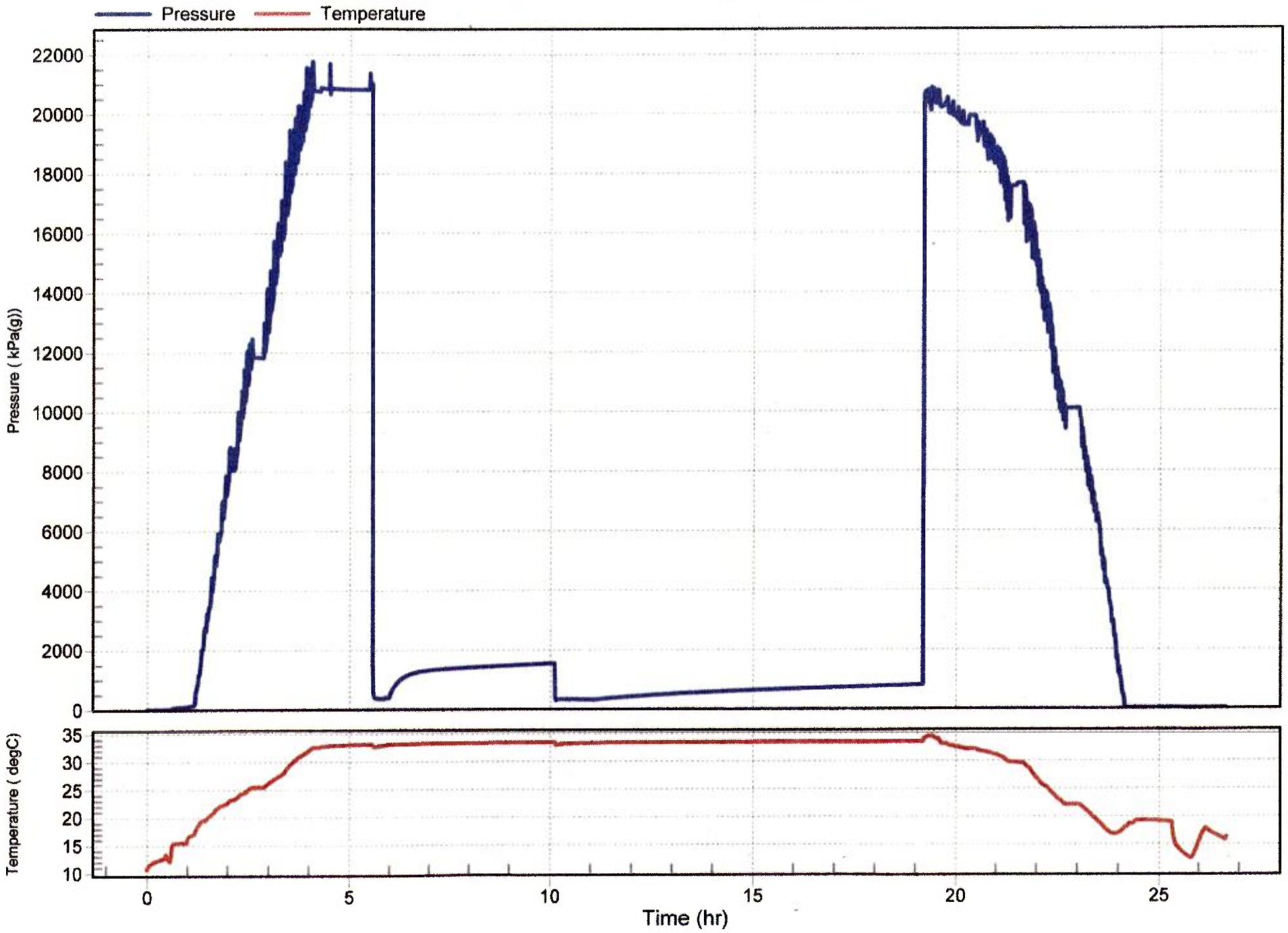
PACKER RUBBER SIZE (MM) 139.7 | BOTTOM HOLE COKE (MM) 19.05

TOOL TALLY

PO Sub	.305
DP / XOver	.305
Recorder	1.524
Shut-in	1.650
Sampler	.914
Sampler	
Hydraulic	1.720
Jars	
M/Record	1.524
Jars	2.130
Temp Rec	
By-pass	
Safety Jt	.660
Packer	
Packer	2.035
Upper Packer depth	2194.026
Packer	.305
Perfs	6.705
By-pass	
M / Record	
E / Record	.305
X Over	.305
DP / DC	115.64
X Over	.305
Blank	
Packer	
Lower Packer depth	
Packer	
Packer	
Perfs	
Recorder	
X Over	
DP / DC	
X Over	
Bullnose	.609
Total depth	2318.20
Total Interval	124.174
Total Tail Pipe	124.174
Tool Make up Time	1.5 Hr

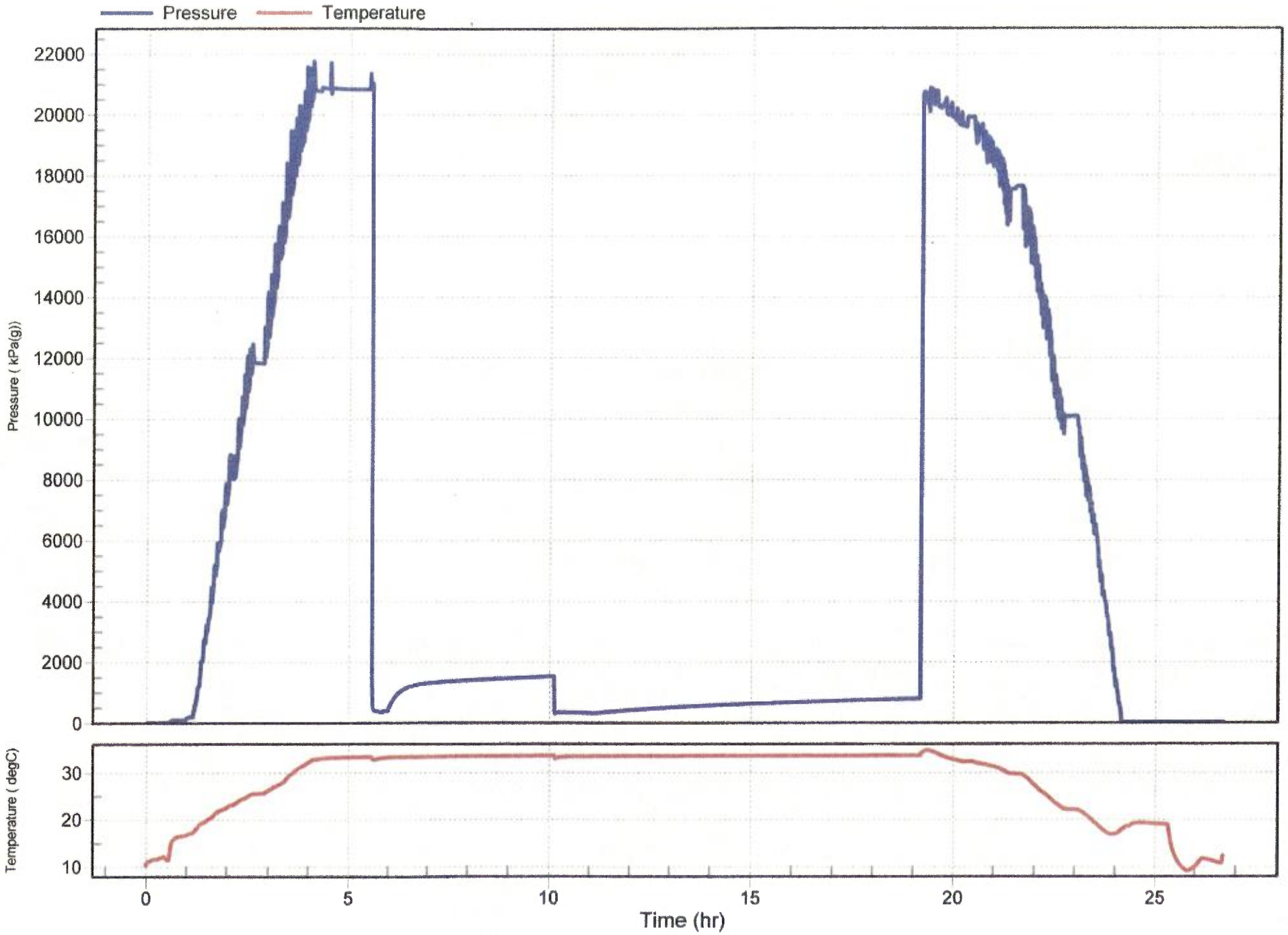
PETROLIA INC.

PETROLIA TAR - POINT #1 DST # THREE RECORDER # 76584



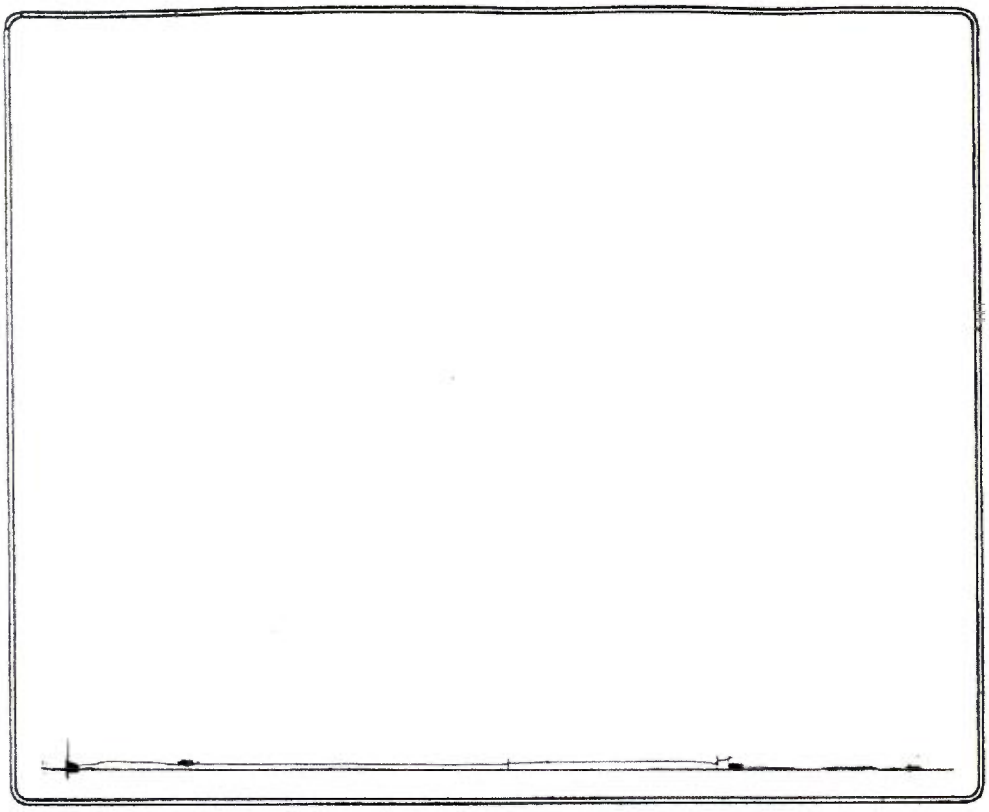
PETROLIA INC

PETROLIA TAR - POINT # 1 DST # THREE RECORDER # 75244

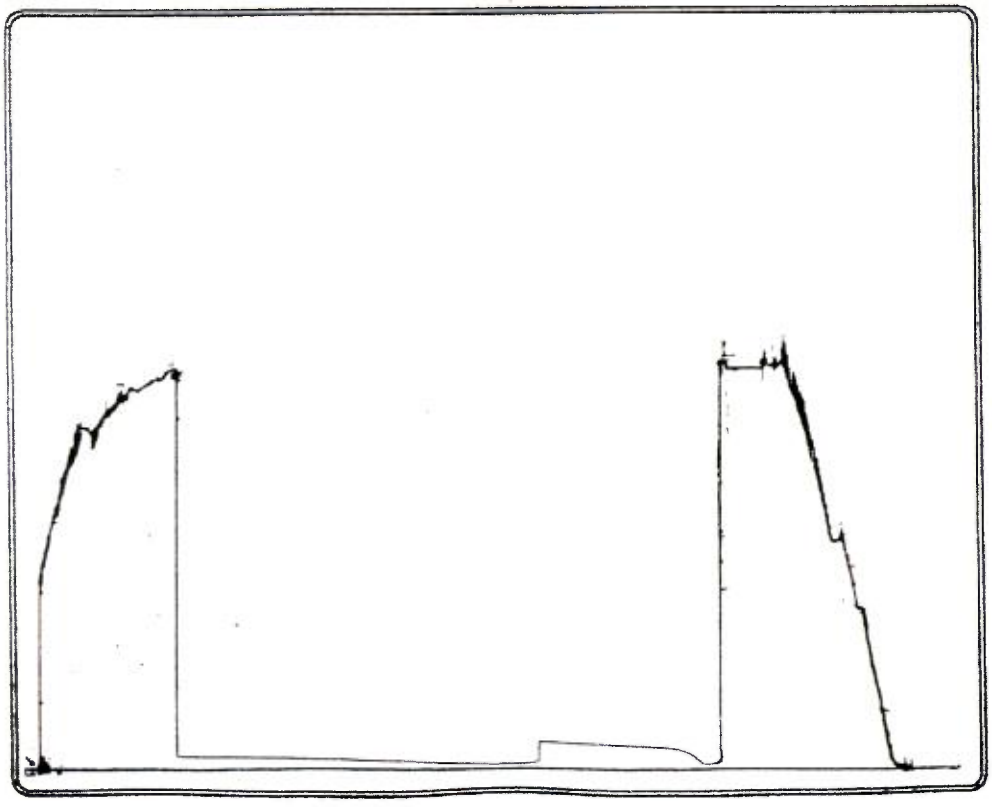


DRILL STEM TEST CHARTS

WELL LOCATION : PETROLIA TAR - POINT #1



Recorder No.	11078
Recorder Depth	2182.17
DST Number	THREE
Pressure Units	kPag
Initial Hydro.	
Initial Preflow	578
Final Preflow	539
1st Final Shut-in	510
1st Initial Flow	510
1st Final Flow	423
2nd Final Shut-in	345
Final Hydro.	



Recorder No.	13380
Recorder Depth	2187.98
DST Number	THREE
Pressure Units	kPag
Initial Hydro.	20862
Initial Preflow	385
Final Preflow	267
1st Final Shut-in	1430
1st Initial Flow	375
1st Final Flow	267
2nd Final Shut-in	691
Final Hydro.	20498

HOLLAND TESTERS LTD.

R.R. #3 Wheatley, Ontario N0P 2P0 1-519-825-3680

Customer: Petrolia Inc. | Customer Rep.: Mr. Marcel Yurchak

Location: Petrolia - Tar Point #1

Interval: 2395-2405 | Total Depth: 2434.45 | Formation: Indian Cove

Test Number: four | Tester: Derrick Holland

Test Type: Dual straddle | K. B. Elevation: 38.36 | Ground Elevation: 33.34

Test Date: December 2, 2009 | Bottom Hole Temperature (C): 35.2

RECOVERY: 6	Metres Total Fluid	Sampler # 005 ; #	
6	Metres of Drilling fluid	SAMPLED AT:	
	Metres of		Metres
	Metres of	6	Metres
	Metres of ID	4	Metres
(21.1 L)	Metres of Had 20 stands of 67mm HWDP above tool (374.53m)	1.829	Metres Above Tool

REMARKS: Preflow showed very weak air blow ¼" in bubble hose decreasing On valve open, had very weak inital puff decreasing to faint at 60 min. valve open start ½" end 1/8" in bubble hose, closed for FSN and had puff of 8" bubbles decreasing to faint in 2 min. dead in 10 min. no gas to surface.

GAS READINGS

TIME min.	PRESS kPa	TEMP C	ORIFICE mm	RATE m3/d	TIME min	PRESS kPa	TEMP C	ORIFICE mm	RATE m3/d

Gas Samples: #00017149; # _____; Sent to Agat Labs, Calgary

Gas Measured by: Took gas sample from BHS at 150 KPa

TOOL TALLY

PO Sub	.305
DP / XOver	.305
Recorder	1.524
Shut-in	1.650
Sampler	.914
Sampler	
Hydraulic	1.720
Jars	2.130
M/Record	1.524
E/Record	
Temp Rec	
By-pass	
Safety Jt	.660
Packer	2.340
Packer	1.524
Upper Packer depth	2395.05

DOWNHOLE PRESSURE DATA (KPAG) Test Times: PF 15 ISN 240 VO 300 FSN X

Recorder Number		13791	11078		76584	75244	13380
Recorder Range		35854	38951		41370	41370	39474
Clock Hour -Emp		24	24		EMP	EMP	24
Depth - Metres		2381.37	2389.31		2401.34	2401.84	2408.67
Position of Pressure Port		FLUID	INSIDE	INSIDE	OUTSIDE	OUTSIDE	OUTSIDE
Initial Hydrostatic	(A)		22712			22805	22863
Start First Flow	(B)	309	345			245	27593
End First Flow	(B1)	345	277			248	
First Shut-In	(C)		2792			2902	
Start Second flow	(D)	399	2219			276	
End Second flow	(E)	265	1170			294	
Second Shut-In	(F		384			N/A	27878
Start Third Flow	(H)						
End Third Flow	(I)						
Third Shut-In	(J)						
Final Hydroststic	(G		21809			22729	22872

Packer	.305
Perfs	5.181
By-pass	
M / Record	
E / Record	.305
X Over	
DP / DC	3.048
X Over	
Blank	.305
Packer	.915
Lower Packer depth	2405.109

Packer	.915
Packer	2.340
Perfs	3.963
Recorder	1.524
X Over	.305
DP / DC	19.38
X Over	.305
Bullnose	.609
Total depth	2434.45

TEST IS: _____ Misrun: _____ Satisfactory Satisfactory

Started in hole @ 2200 Hr. | Opened tool @ 0125 Hr. | Out of hole @ 1830 Hr.

DP size (mm) 101.6 | Weight (kg/m) 23.35 | Main hole size (mm) 152.4

DP length (m) 2008.92 HWDP | ID (mm) 67mm HWDP | above tool (m) 374.53

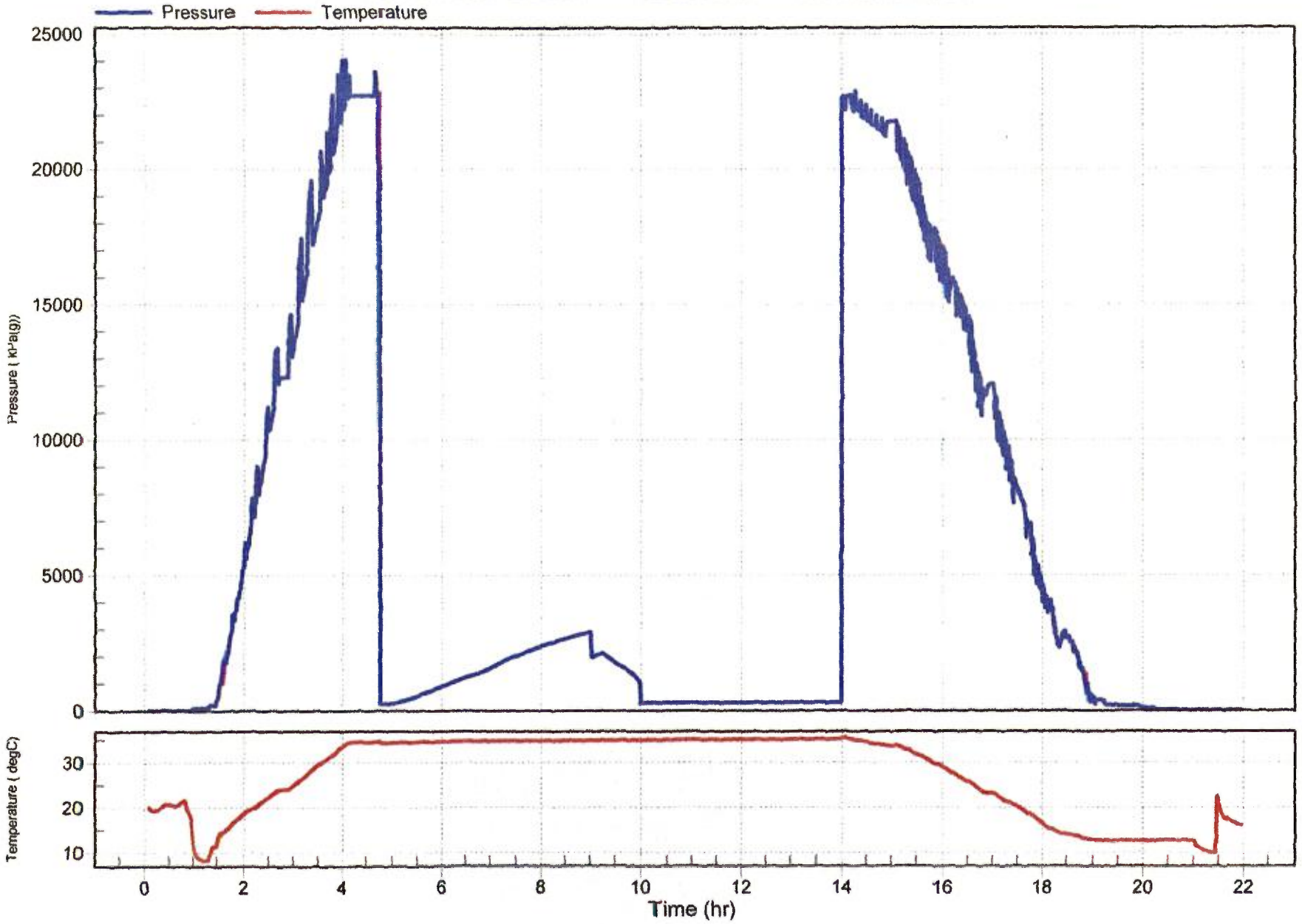
Mud weight (kg/m3) 1060 | Visc (s/L) 55 | Water loss (cm3) 10

PACKER RUBBER SIZE (MM) 139.7 | BOTTOM HOLE COKE (MM) 19.05

Total Interval	10.059
Total Tail Pipe	29.341
Tool Make up Time	2 Hr

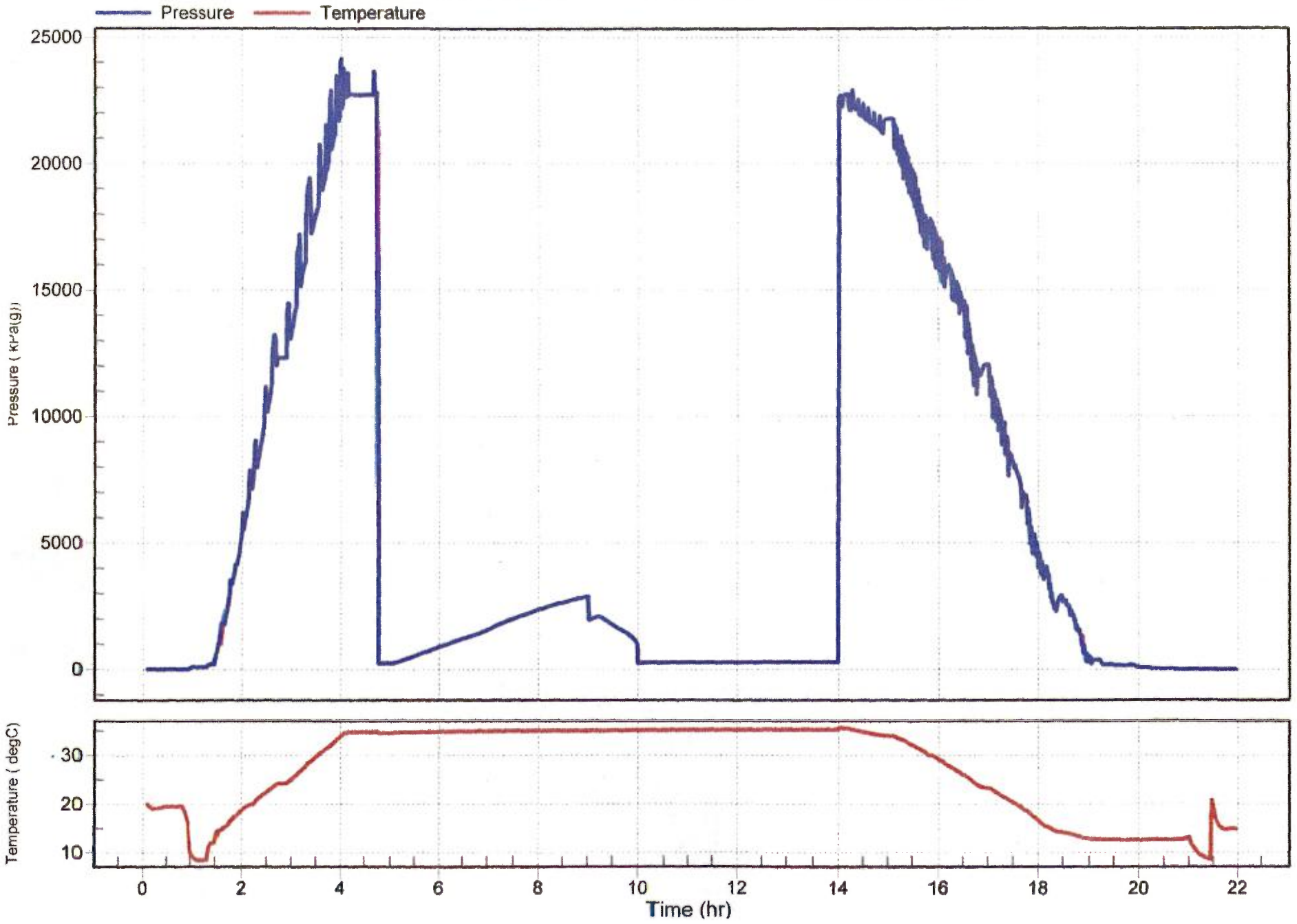
PETROLIA INC.

PETROLIA TAR - POINT #1 DST # FOUR RECORDER # 76584



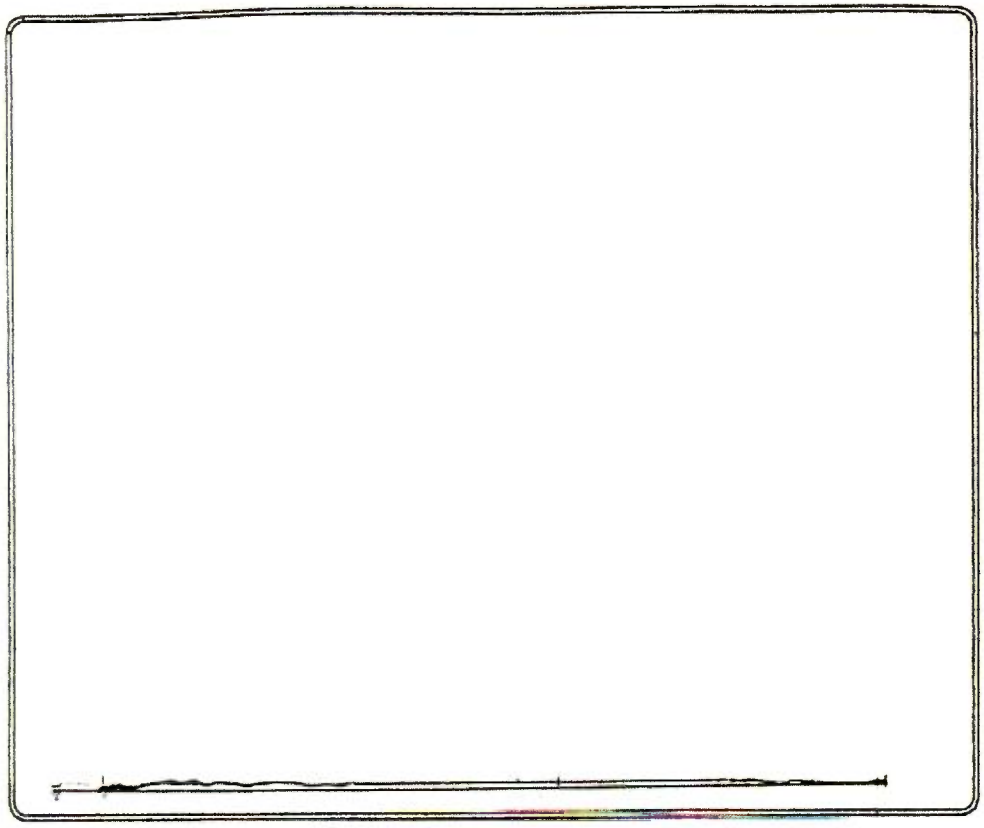
PETROLIA INC.

PETROLIA TAR - POINT #1 DST # FOUR RECORDER # 75244

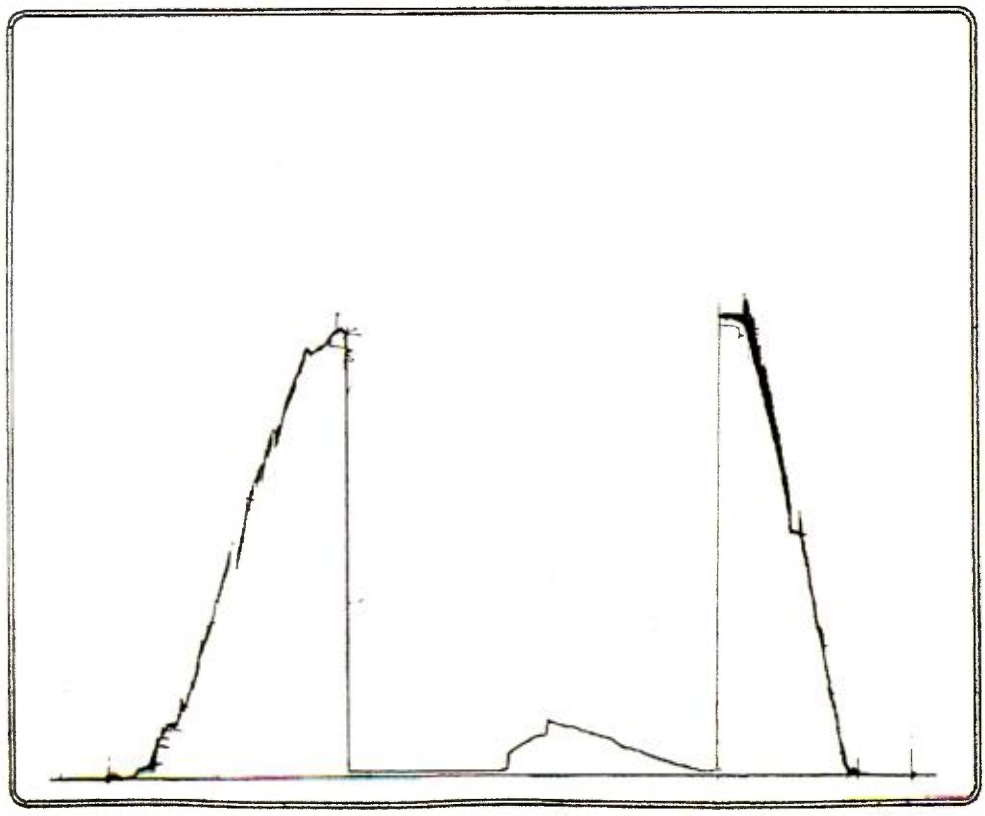


DRILL STEM TEST CHARTS

WELL LOCATION : PETROLIA TAR - POINT # 1



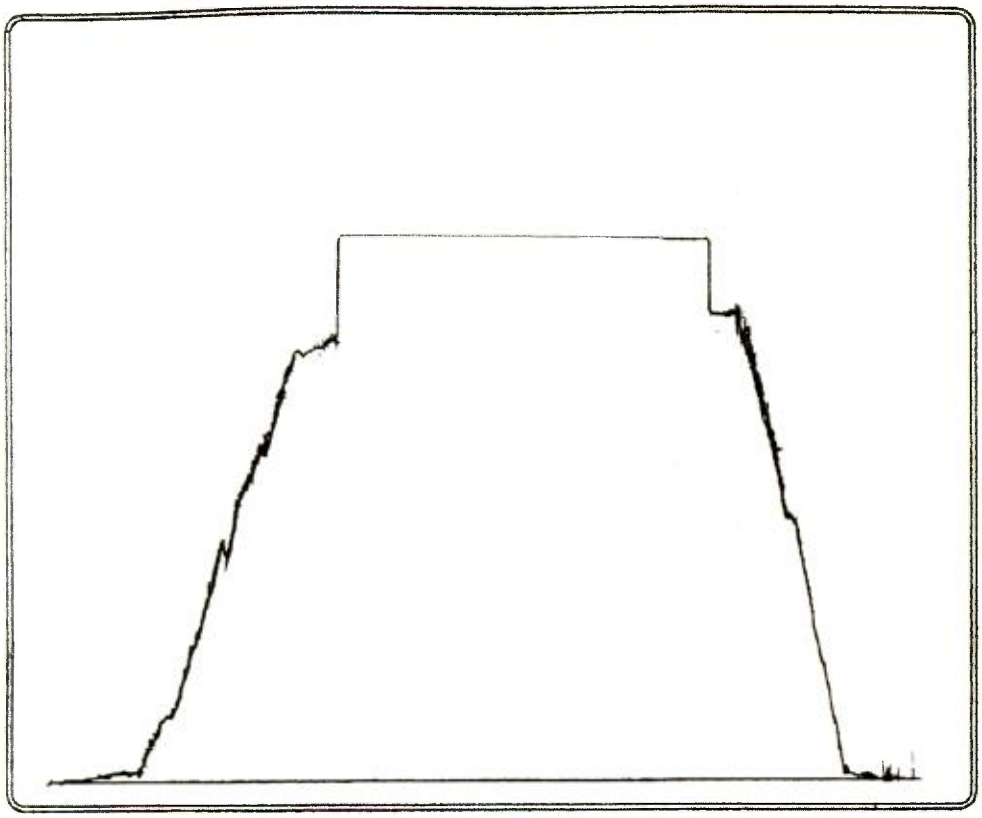
Recorder No.	13791
Recorder Depth	2381.37
DST Number	FOUR
Pressure Units	kPag
Initial Hydro.	
Initial Preflow	309
Final Preflow	345
1st Final Shut-in	
1st Initial Flow	399
1st Final Flow	265
2nd Final Shut-in	
Final Hydro.	



Recorder No.	11078
Recorder Depth	2389.31
DST Number	FOUR
Pressure Units	kPag
Initial Hydro.	22712
Initial Preflow	345
Final Preflow	277
1st Final Shut-in	2792
1st Initial Flow	2219
1st Final Flow	1170
2nd Final Shut-in	384
Final Hydro.	21809

DRILL STEM TEST CHARTS

WELL LOCATION : PETROLIA TAR - POINT # 1



Recorder No.	13380
Recorder Depth	2408.67
DST Number	FOUR
Pressure Units	kPag
Initial Hydro.	22863
Initial Preflow	27593
Final Preflow	
1st Final Shut-in	
1st Initial Flow	
1st Final Flow	
2nd Final Shut-in	27878
Final Hydro.	22872

Recorder No.	
Recorder Depth	
DST Number	
Pressure Units	
Initial Hydro.	
Initial Preflow	
Final Preflow	
1st Final Shut-in	
1st Initial Flow	
1st Final Flow	
2nd Final Shut-in	
Final Hydro.	

HOLLAND TESTERS LTD.

R.R. #3 Wheatley, Ontario N0P 2P0 1-519-825-3680

Customer: Petrolia Inc. | Customer Rep.: Mr. Marcel Yurchak

Location: Petrolia - Tar Point #1

Interval: 2311.7-2334.2 | Total Depth: 2434.45 | Formation: Indian Cove

Test Number: five | Tester: Derrick Holland

Test Type: Dual straddle | K. B. Elevation: 38.36 | Ground Elevation: 33.34

Test Date: December 3-4, 2009 | Bottom Hole Temperature (C): 34.5

RECOVERY: 7.8	Metres Total Fluid	Sampler # 005 ; #	
7.8	Metres of Drilling fluid	SAMPLED AT:	
	Metres of		Metres
(27.5 L)	Metres of	7.0	Metres
	Metres of	4.50	Metres
	Metres of	1.829	Metres
Used 20 stands of Hwdp above tools 67mm ID (374.53m)		BHS	Above Tool

REMARKS: Open for preflow, had very weak inital puff, 1" in bubble pail in 3 min. decreasing throughout valve open, had very faint air blow ¼" in bubble pail, decreasing to dead in 5 min. no gas to surface, mud held throughout, no fill.

GAS READINGS

TIME min.	PRESS kPa	TEMP C	ORIFICE mm	RATE m3/d	TIME min	PRESS kPa	TEMP C	ORIFICE mm	RATE m3/d

Gas Samples: # ; # ; Sent to

Gas Measured by:

TOOL TALLY

PO Sub	.305
DP / XOver	.305
Recorder	1.524
Shut-in	1.650
Sampler	.914
Sampler	
Hydraulic	1.720
Jars	2.130
M/Record	1.524
E/Record	
Temp Rec	
By-pass	
Safety Jt	.660
Packer	2.340
Packer	1.524
Upper Packer depth	2311.71
Packer	.305
Perfs	.914
By-pass	
M / Record	
E / Record	.305
X Over	.305
DP / DC	19.12
X Over	.305
Blank	.305
Packer	.915
Lower Packer depth	2334.19
Packer	.915
Packer	2.340
Perfs	7.62
Recorder	1.524
X Over	.305
DP / DC	86.64
X Over	.305
Bullnose	.609
Total depth	2434.45

DOWNHOLE PRESSURE DATA (KPAG) Test Times: PF 15 ISN 240 VO 60 FSN 240

Recorder Number		13791	11078		76584	75244	13380
Recorder Range		35854	38951		41370	41370	39474
Clock Hour - Emp		24	24		EMP	EMP	24
Depth - Metres		2298.03	2305.97		2313.74	2314.24	2337.75
Position of Pressure Port		FLUID	INSIDE	INSIDE	OUTSIDE	OUTSIDE	OUTSIDE
Initial Hydrostatic	(A)		22062		22076	21963	
Start First Flow	(B)	157	413		197	191	4199
End First Flow	(B1)	148	287		233	218	4051
First Shut-In	(C)	94	1597		1667	1640	7953
Start Second flow	(D)	67	394		254	231	
End Second flow	(E)	85	316		285	267	5697
Second Shut-In	(F	193	966		1008	968	8042
Start Third Flow	(H)						
End Third Flow	(I)						
Third Shut-In	(J)						
Final Hydroststic	(G		21664		21883	21889	22587

TEST IS: Misrun; Satisfactory Satisfactory

Started in hole @ 2200 Hr. | Opened tool @ 0145 Hr. | Out of hole @ 1600 Hr.

DP size (mm) 101.6 | Weight (kg/m) 23.35 | Main hole size (mm) 152.4

DP length (m) 1926.59 HWDP | size ID (mm) 67 HWDP | above tool (m) 374.53

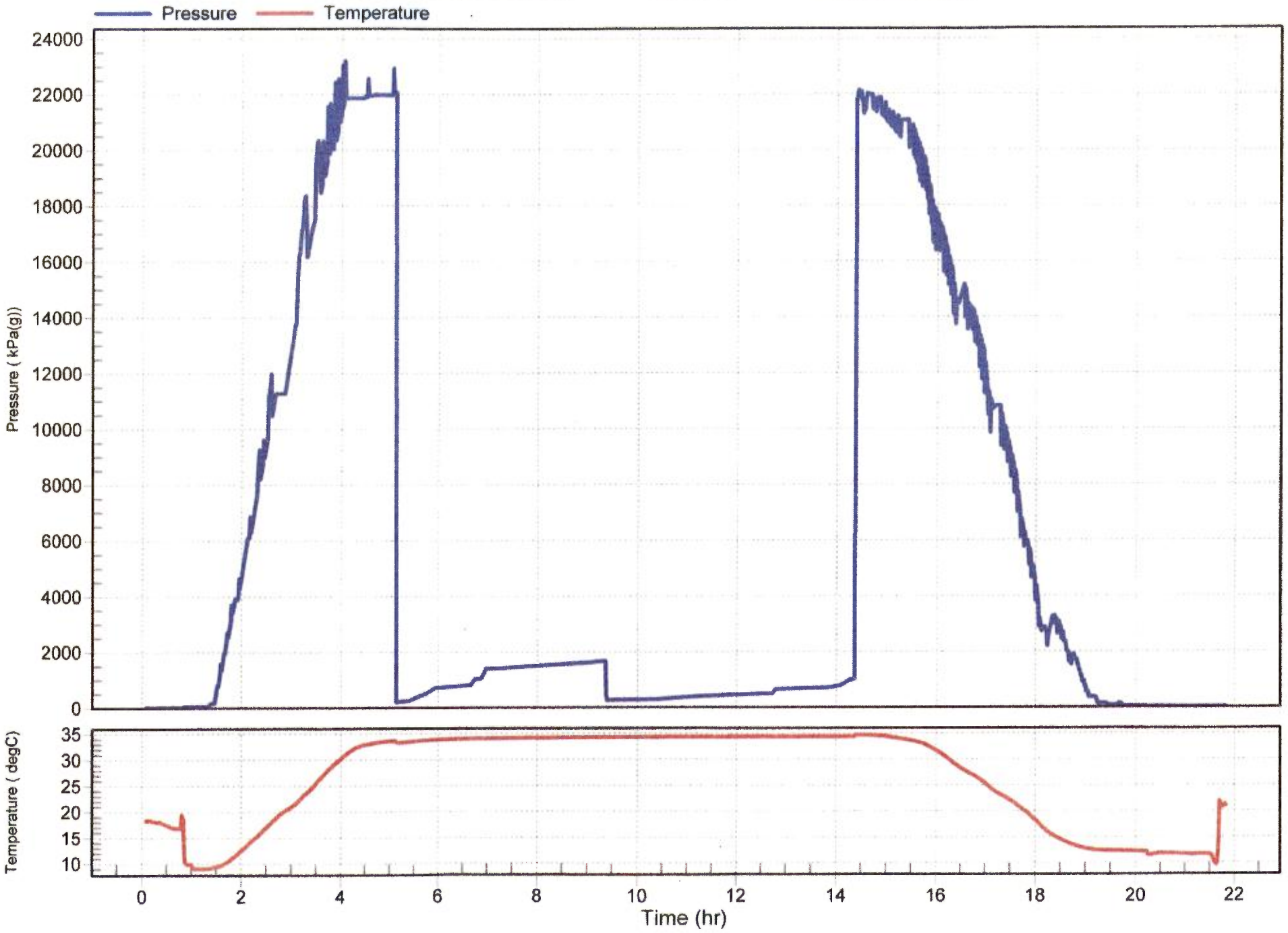
Mud weight (kg/m3) 1060 | Visc (s/L) 55 | Water loss (cm3) 10

PACKER RUBBER SIZE (MM) 139.7 | BOTTOM HOLE COKE (MM) 19.05

Total Interval	22.474
Total Tail Pipe	100.26
Tool Make up Time	2 Hr

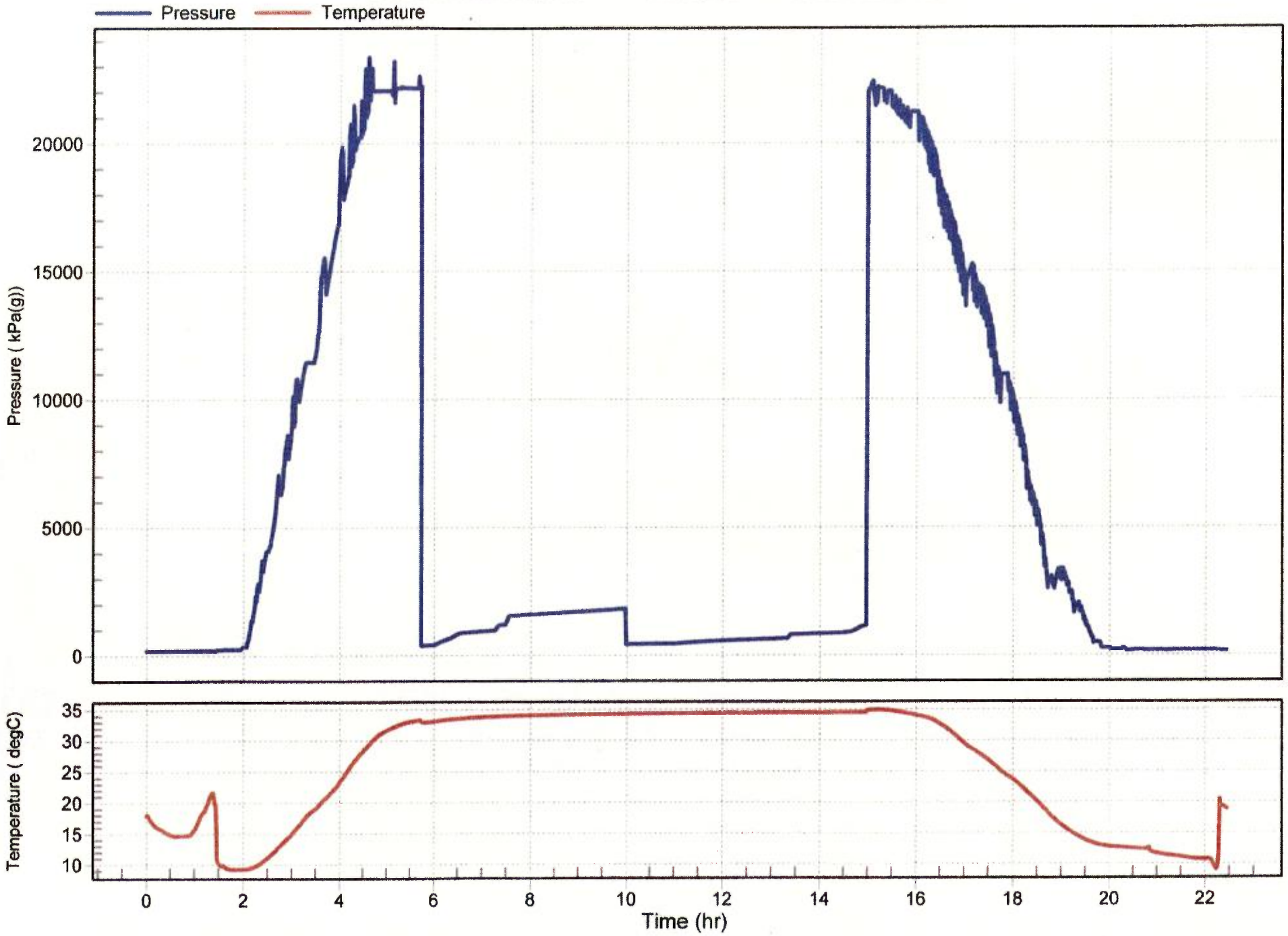
PETROLIA INC.

PETROLIA TAR - POINT #1 DST # FIVE RECORDER # 76584



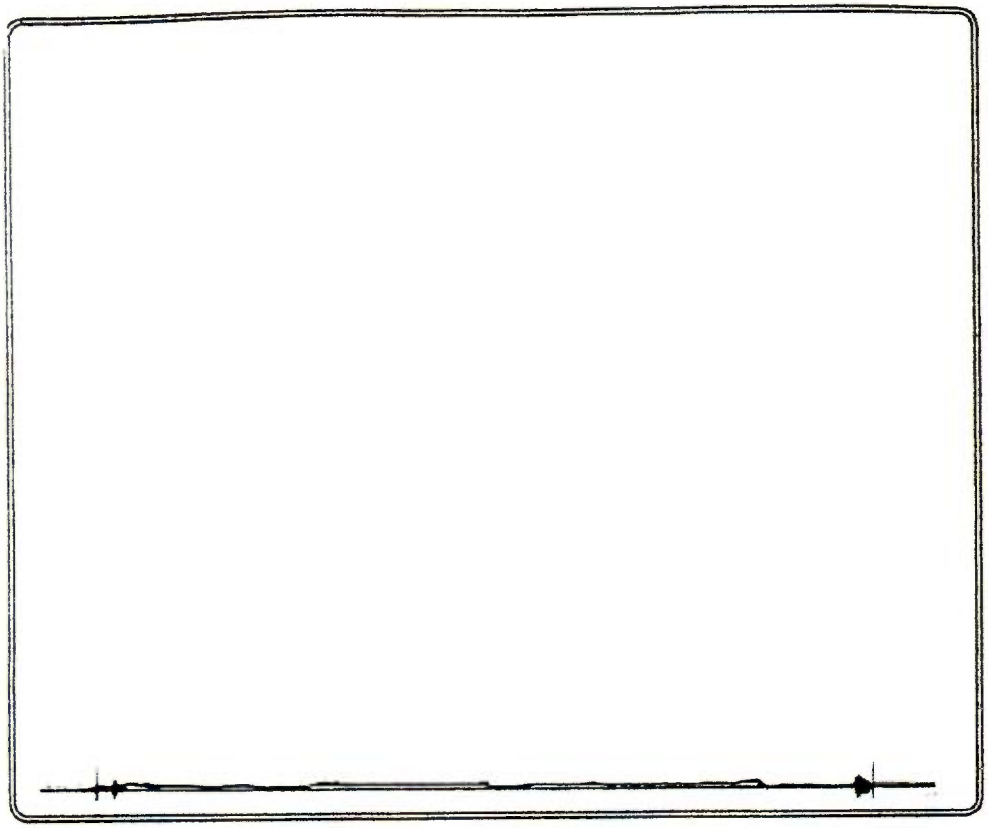
PETROLIA INC.

PETROLIA TAR - POINT #1 DST # FIVE RECORDER # 75244

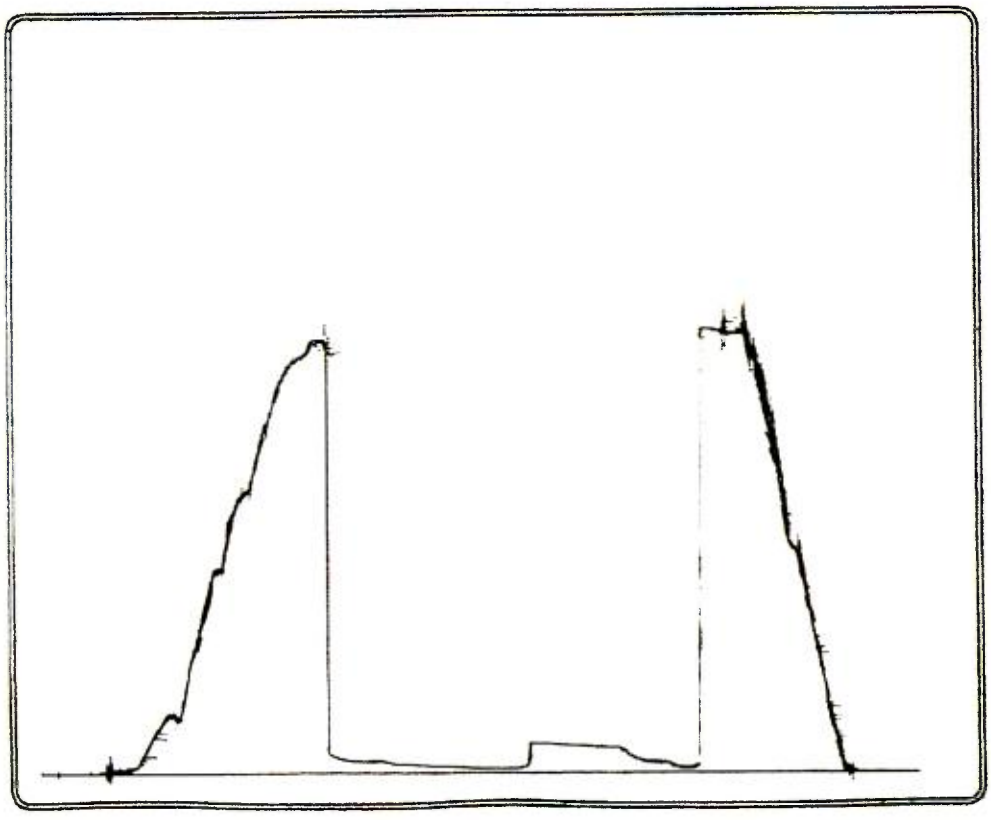


DRILL STEM TEST CHARTS

WELL LOCATION : PETROLIA TAR - POINT # 1



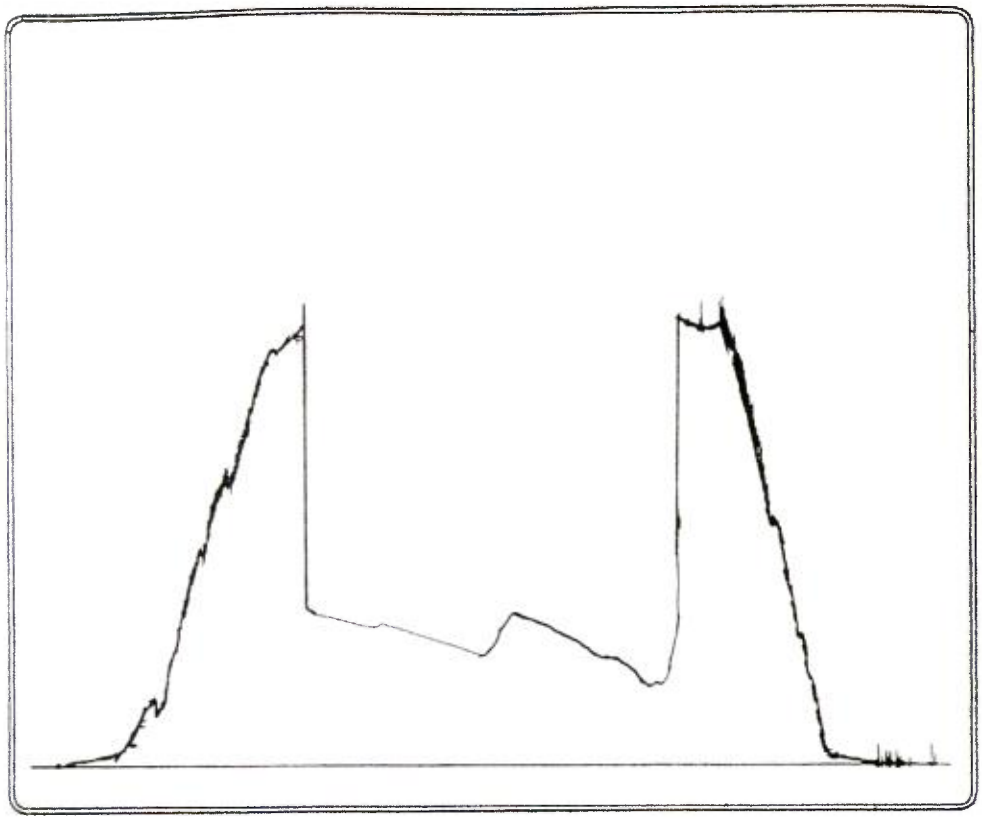
Recorder No.	13791
Recorder Depth	2298.03
DST Number	FIVE
Pressure Units	kPag
Initial Hydro.	
Initial Preflow	157
Final Preflow	148
1st Final Shut-in	94
1st Initial Flow	67
1st Final Flow	85
2nd Final Shut-in	193
Final Hydro.	



Recorder No.	11078
Recorder Depth	2305.97
DST Number	FIVE
Pressure Units	kPag
Initial Hydro.	22062
Initial Preflow	413
Final Preflow	287
1st Final Shut-in	1597
1st Initial Flow	394
1st Final Flow	316
2nd Final Shut-in	966
Final Hydro.	21664

DRILL STEM TEST CHARTS

WELL LOCATION : PETROLIA TAR - POINT #1



Recorder No.	13380
Recorder Depth	2337.75
DST Number	FIVE
Pressure Units	kPag
Initial Hydro.	
Initial Preflow	4199
Final Preflow	4051
1st Final Shut-in	7953
1st Initial Flow	
1st Final Flow	5697
2nd Final Shut-in	8042
Final Hydro.	22587

Recorder No.	
Recorder Depth	
DST Number	
Pressure Units	
Initial Hydro.	
Initial Preflow	
Final Preflow	
1st Final Shut-in	
1st Initial Flow	
1st Final Flow	
2nd Final Shut-in	
Final Hydro.	

AGAT® Laboratories

GAS ANALYSIS

Container Identification
12772

Operator Name	Laboratory Number
PETROLIA INC.	09G373731A

Unique Well Identifier	Well Name
NOT AVAILABLE	PETROLIA -TAR POINT # 1

Field or Area	Pool or Zone	Sampler's Company
TAR POINT		HOLLAND TESTERS

Well License	Elevation	Test Type	Test No.	Name of Sampler
	KB m 32.50 GRD m 28.00	DST	1	

Test Interval or Perfs mKB		Sampling Point
2045.0-2200.0		BOTTOM HOLE SAMPLER
mKB		

	Separator	Reservoir	Source	Sampled	Received
Pressure (kPa)			10342	10342	5000
Temperature			0	0	21

Date Sampled	Date Received	Date Analyzed	Date Reported	Entered By	Certified By
Nov 20, 2009	Dec 03, 2009	Dec 09, 2009	Dec 09, 2009	Gerry Ecker	Gerry Ecker

Other Information
FORMATION: INDIAN COVE

** Results relate only to the items tested*

Note: Sampling Point, Unique Well Identifier and/or Pool or Zone information was unavailable at time of reporting. This information is integral to AGAT's WebFLUIDs, a comparison, history and trending analysis system.

COMP	MOLE FRACTION		PETROLEUM LIQUID
	AIR FREE AS RECEIVED	AIR FREE ACID GAS FREE	mL / m³
H2	0.0002	0.0002	
He	0.0003	0.0003	
N2	0.0203	0.0203	
CO2	TRACE	0.0000	
H2S	0.0000	0.0000	
C1	0.8133	0.8133	
C2	0.0996	0.0996	
C3	0.0374	0.0374	137.4
IC4	0.0052	0.0052	22.7
NC4	0.0087	0.0087	36.6
IC5	0.0028	0.0028	13.7
NC5	0.0031	0.0031	15.0
C6	0.0044	0.0044	24.1
C7+	0.0047	0.0047	29.7
Total	1.0000	1.0000	279.2

GROSS HEATING VALUE MJ/m³
15° C AND 101.325 kPa

Air Free As Received	Moisture & Acid Gas Free	C7+, Air Free As Received
45.26	45.26	0.99

RELATIVE DENSITY (CALCULATED) **DENSITY**

Moisture Free	Moisture & Acid Gas Free	C7+, Moisture Free	C7+, Portion Whole Density	C7+ Density (kg/m3)	Total Sample Density(kg/m3)
0.703	0.703	3.563	0.017	692.3	0.861

PSEUDO CRITICAL PROPERTIES (CALCULATED)

As Sampled		Acid Gas Free	
pPc (abs) kPa	pTc K	pPc (abs) kPa	pTc K
4551.6	215.2	4551.6	215.2

RELATIVE MOLECULAR MASS

Total Gas	C_7+
20.4	103.2

VAPOUR PRESSURE (Pentanes +): 61.57 kPa

H2S g/m³: 0.00

AGAT® Laboratories

OIL ANALYSIS

Container Identification
PB4

Operator Name	Laboratory Number
PETROLIA INC.	09O373731D

Unique Well Identifier	Well Name
Not Available	PETROLIA -TAR POINT # 1

Field or Area	Pool or Zone	Sampler's Company
TAR POINT		HOLLAND TESTERS

Well License	Elevation	Test Type	Test No.	Name of Sampler
	KB m 38.36 GRD m 33.34	DST	1	

Test Interval or Perfs mKB		Sampling Point
2045.00-2200.00		BOTTOM HOLE SAMPLER
mKB		

	Separator	Reservoir	Source	Sampled	Received
Pressure (kPa)					
Temperature					

Date Sampled	Date Received	Date Analyzed	Date Reported	Entered By	Certified By
Nov 19, 2009	Dec 03, 2009	Dec 14, 2009	Dec 14, 2009	Nada Todorovic	Nada Todorovic

Other Information
TOP,E 403 810 062,N 5 397 657 189, UTM 20 NAD 83 POOL: INDIAN COVE

* Results relate only to the items tested

Note: Sampling Point, Unique Well Identifier and/or Pool or Zone information was unavailable at time of reporting. This information is integral to AGAT's WebFLUIDs, a comparison, history and trending analysis system.

Sample Properties

Colour of Clean Oil	Colour Number ASTM D-1500
Orange	#4 A.S.T.M.

B.S.& W. (Volume Fraction)

Water	Sediment	Total
0.010	Trace	0.010

API Gravity @ 15°C
45.77

Density - After Cleaning

Relative	Absolute kg/m³
0.7982	797.5

Total Sulphur Mass Fraction	Pour Point / °C (A.S.T.M. D-97)
0.00054	-27

Viscosity

Temp °C	Absolute mPa°s	Kinematic mm²°s-1
15	2.79	3.50
25	2.18	2.76
38	1.58	2.03

Distillation

Absolute Barometric Pressure (kPa)
88.6

Room Temp (°C)
23.0

Characterization Factor
12.1

Other Comments:

D-86 Distillation not performed due to excessive foaming of the sample.

AGAT® Laboratories

OIL ANALYSIS

Container Identification
PB1

Operator Name	Laboratory Number
PETROLIA INC.	09O373731A

Unique Well Identifier	Well Name
Not Available	PETROLIA -TAR POINT # 1

Field or Area	Pool or Zone	Sampler's Company
TAR POINT		HOLLAND TESTERS

Well License	Elevation				Test Type	Test No.	Name of Sampler
	KB m	38.36	GRD m	33.34	DST	1	

Test Interval or Perfs mKB		Sampling Point
2045.00-2200.00		
mKB		

	Separator	Reservoir	Source	Sampled	Received
Pressure (kPa)					
Temperature					

Date Sampled	Date Received	Date Analyzed	Date Reported	Entered By	Certified By
Nov 19, 2009	Dec 03, 2009	Dec 14, 2009	Dec 14, 2009	Nada Todorovic	Nada Todorovic

Other Information
BOTTOM,E 403 810 062,N 5 397 657 189, UTM 20 NAD 83 POOL: INDIAN COVE SP: 1.58 m ABOVE TOOL

* Results relate only to the items tested

Note: Sampling Point, Unique Well Identifier and/or Pool or Zone information was unavailable at time of reporting. This information is integral to AGAT's WebFLUIDs, a comparison, history and trending analysis system.

Sample Properties

Colour of Clean Oil	Colour Number ASTM D-1500
Orange	#4 A.S.T.M.

B.S.& W. (Volume Fraction)

Water	Sediment	Total
0.680	Trace	0.680

API Gravity @ 15°C
43.03

Density - After Cleaning

Relative	Absolute kg/m³
0.8108	810.0

Total Sulphur Mass Fraction	Pour Point / °C (A.S.T.M. D-97)
0.00055	-12

Viscosity

Temp °C	Absolute mPa°s	Kinematic mm²°s-1
15	3.89	4.80
25	2.88	3.59
38	2.18	2.75

Distillation

Absolute Barometric Pressure (kPa)
88.6

Room Temp (°C)
23.0

Characterization Factor
12.2

Other Comments:

D-86 Distillation not performed due to excessive foaming of the sample.

AGAT® Laboratories

WATER ANALYSIS

Container Identification
PB1

Operator Name	Laboratory Number
PETROLIA INC.	09W373731A

Unique Well Identifier	Well Name
NOT AVAILABLE	PETROLIA -TAR POINT # 1

Field or Area	Pool or Zone	Sampler's Company
TAR POINT	INDIAN COVE	HOLLAND TESTERS

Well License	Elevation				Test Type	Test No.	Name of Sampler
	KB m	38.36	GRD m	33.34	DST	1	

Test Interval or Perfs mKB		Sampling Point
2045-2200		ABOVE TOOL
mKB		

	Separator	Reservoir	Source	Sampled	Received
Pressure (kPa)					
Temperature					

Date Sampled	Date Received	Date Analyzed	Date Reported	Entered By	Certified By
Nov 19, 2009	Dec 03, 2009	Dec 14, 2009	Dec 14, 2009	Maria Raymundo	Maria Raymundo

Other Information
BOTTOM,E 403 810 062,N 5 397 657 189, UTM 20 NAD 83 ; SP:1.58 m ABOVE TOOL

* Results relate only to the items tested

Note: Sampling Point, Unique Well Identifier and/or Pool or Zone information was unavailable at time of reporting. This information is integral to AGAT's WebFLUIDs, a comparison, history and trending analysis system.

Cations

ION	mg/L	mmol/L	meq/L
Na	4160.0	181.0	181.0
K	31400.0	803.1	803.1
Ca	41.0	1.0	2.0
Mg	11.5	0.5	0.9
Fe	TRACE	0.0	TRACE
Total Cations			987.0

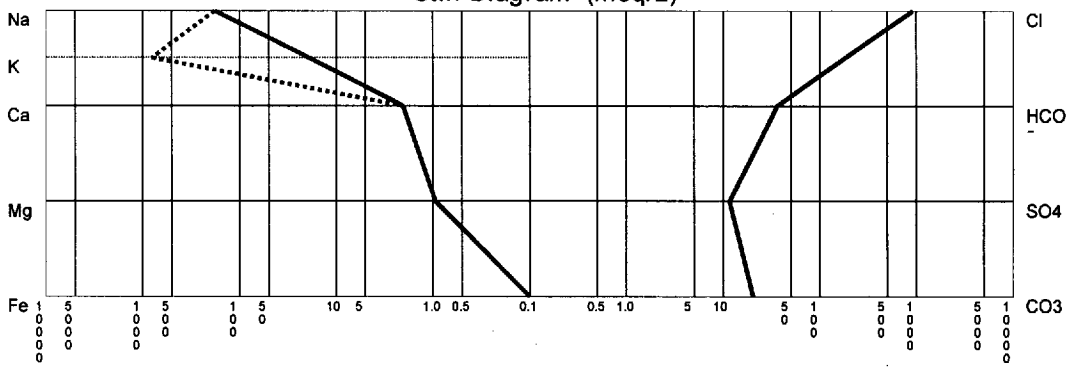
Anions

ION	mg/L	mmol/L	meq/L
Cl	32490.0	916.4	916.4
HCO3	2189.3	35.9	35.9
SO4	555.0	5.8	11.6
CO3	1217.3	20.3	20.3
OH	Nil	Nil	Nil
Total Anions			984.2

Other Measurements

Measurement	Value
Total Dissolved Solids (Calculated) mg/L	70701
Observed pH	9.58
H2S (25°C) mg/L	N/D
Relative Density (25°C)	1.047
Resistivity/OHM·m (25°C)	0.119
Salinity %	5.61
Total Alkalinity as CaCO3 mg/L	3406.67

Stiff Diagram (meq/L)



AGAT® Laboratories

WATER ANALYSIS

Container Identification
PB8

Operator Name	Laboratory Number
PETROLIA INC.	09W373731H

Unique Well Identifier	Well Name
NOT AVAILABLE	PETROLIA -TAR POINT # 1

Field or Area	Pool or Zone	Sampler's Company
TAR POINT	YORK RIVER	HOLLAND TESTERS

Well License	Elevation	Test Type	Test No.	Name of Sampler
	KB m 38.36 GRD m 33.34	DST	2	

Test Interval or Perfs mKB		Sampling Point
1527.9-1584.3		BOTTOM HOLE SAMPLER
mKB		

	Separator	Reservoir	Source	Sampled	Received
Pressure (kPa)					
Temperature					

Date Sampled	Date Received	Date Analyzed	Date Reported	Entered By	Certified By
Nov 20, 2009	Dec 03, 2009	Dec 14, 2009	Dec 14, 2009	Maria Raymundo	Maria Raymundo

Other Information
403 810 062,N 5 397 657 189, UTM 20 NAD 83

* Results relate only to the items tested

Note: Sampling Point, Unique Well Identifier and/or Pool or Zone information was unavailable at time of reporting. This information is integral to AGAT's WebFLUIDs, a comparison, history and trending analysis system.

Cations

ION	mg/L	mmol/L	meq/L
Na	4840.0	210.5	210.5
K	30400.0	777.5	777.5
Ca	42.0	1.0	2.1
Mg	13.3	0.5	1.1
Fe	TRACE	0.0	TRACE
Total Cations			991.2

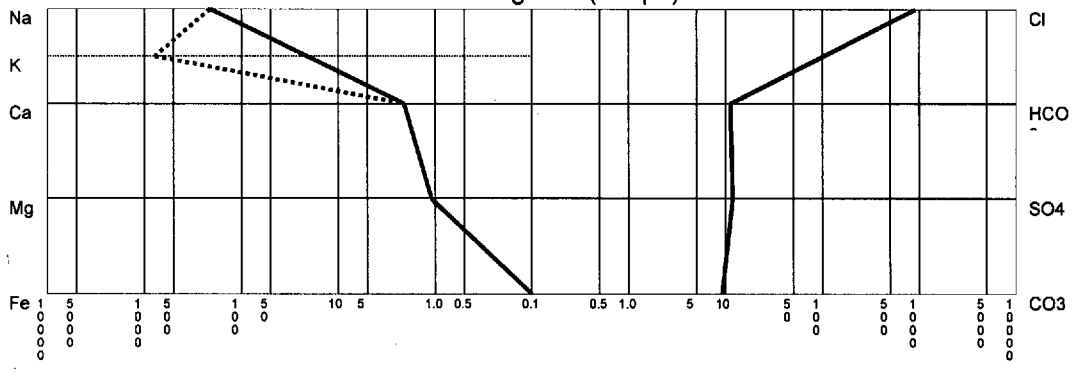
Anions

ION	mg/L	mmol/L	meq/L
Cl	31990.0	902.3	902.3
HCO3	683.3	11.2	11.2
SO4	568.0	5.9	11.8
CO3	550.0	9.2	9.2
OH	Nil	Nil	Nil
Total Anions			934.5

Other Measurements

Measurement	Value
Total Dissolved Solids (Calculated) mg/L	68593
Observed pH	8.88
H2S (25°C) mg/L	N/D
Relative Density (25°C)	1.049
Resistivity/OHM·m (25°C)	0.117
Salinity %	5.51
Total Alkalinity as CaCO3 mg/L	1233.33

Stiff Diagram (meq/L)



AGAT® Laboratories

WATER ANALYSIS

Container Identification
PB9

Operator Name	Laboratory Number
PETROLIA INC.	09W373731I

Unique Well Identifier	Well Name
NOT AVAILABLE	PETROLIA -TAR POINT # 1

Field or Area	Pool or Zone	Sampler's Company
TAR POINT	YORK RIVER	HOLLAND TESTERS

Well License	Elevation	Test Type	Test No.	Name of Sampler
	KB m 38.36 GRD m 33.34	DST	2	

Test Interval or Perfs mKB	Sampling Point
1527.9-1584.3 mKB	BOTTOM HOLE SAMPLER

	Separator	Reservoir	Source	Sampled	Received
Pressure (kPa)					
Temperature					

Date Sampled	Date Received	Date Analyzed	Date Reported	Entered By	Certified By
Nov 20, 2009	Dec 03, 2009	Dec 14, 2009	Dec 14, 2009	Maria Raymundo	Maria Raymundo

Other Information
403 810 062,N 5 397 657 189, UTM 20 NAD 83

* Results relate only to the items tested

Note: Sampling Point, Unique Well Identifier and/or Pool or Zone information was unavailable at time of reporting. This information is integral to AGAT's WebFLUIDs, a comparison, history and trending analysis system.

Cations

ION	mg/L	mmol/L	meq/L
Na	4520.0	196.6	196.6
K	32400.0	828.7	828.7
Ca	37.0	0.9	1.8
Mg	14.0	0.6	1.2
Fe	TRACE	0.0	TRACE
Total Cations			1028.3

Anions

ION	mg/L	mmol/L	meq/L
Cl	32490.0	916.4	916.4
HCO3	850.0	13.9	13.9
SO4	591.0	6.2	12.3
CO3	300.0	5.0	5.0
OH	Nil	Nil	Nil
Total Anions			947.6

Other Measurements

Measurement	Value
Total Dissolved Solids (Calculated) mg/L	70742
Observed pH	8.98
H2S (25°C) mg/L	N/D
Relative Density (25°C)	0.977
Resistivity/OHM·m (25°C)	0.117
Salinity %	6.01
Total Alkalinity as CaCO3 mg/L	1150.00

Stiff Diagram (meq/L)



AGAT® Laboratories

GAS ANALYSIS

Container Identification
4000286

Operator Name	Laboratory Number
PETROLIA INC.	09GL376793B

Unique Well Identifier	Well Name
NOT AVAILABLE	PETROLIA - TAR POINT #1

Field or Area	Pool or Zone	Sampler's Company
ONTARIO	INDIAN COVE	HOLLAND TESTERS

Well License	Elevation	Test Type	Test No.	Name of Sampler
	KB m 38.36 GRD m 33.34	DST	3	

Test Interval or Perfs mKB		Sampling Point
2194.0-2318.2		BOTTOM HOLE SAMPLER
mKB		

	Separator	Reservoir	Source	Sampled	Received
Pressure (kPa)			690	690	650
Temperature			-2	-2	21

Date Sampled	Date Received	Date Analyzed	Date Reported	Entered By	Certified By
Nov 29, 2009	Dec 18, 2009	Dec 21, 2009	Dec 21, 2009	Gerry Ecker	Gerry Ecker

Other Information

* Results relate only to the items tested

Note: Sampling Point, Unique Well Identifier and/or Pool or Zone information was unavailable at time of reporting. This information is integral to AGAT's WebFLUIDs, a comparison, history and trending analysis system.

COMP	MOLE FRACTION		PETROLEUM LIQUID
	AIR FREE AS RECEIVED	AIR FREE ACID GAS FREE	mL / m³
H2	0.0005	0.0005	
He	0.0009	0.0009	
N2	0.0468	0.0468	
CO2	TRACE	0.0000	
H2S	0.0000	0.0000	
C1	0.7357	0.7357	
C2	0.1193	0.1193	
C3	0.0591	0.0591	217.2
IC4	0.0090	0.0090	39.3
NC4	0.0163	0.0163	68.6
IC5	0.0043	0.0043	21.0
NC5	0.0044	0.0044	21.3
C6	0.0024	0.0024	13.1
C7+	0.0013	0.0013	8.2
Total	1.0000	1.0000	388.7

GROSS HEATING VALUE MJ/m³
15° C AND 101.325 kPa

Air Free As Received	Moisture & Acid Gas Free	C7+, Air Free As Received
46.43	46.43	0.27

RELATIVE DENSITY (CALCULATED) DENSITY

Moisture Free	Moisture & Acid Gas Free	C7+, Moisture Free	C7+, Portion Whole Density	C7+ Density (kg/m3)	Total Sample Density(kg/m3)
0.751	0.751	3.534	0.005	691.1	0.920

PSEUDO CRITICAL PROPERTIES (CALCULATED)

As Sampled		Acid Gas Free	
pPc (abs) kPa	pTc K	pPc (abs) kPa	pTc K
4510.4	221.0	4510.4	221.0

RELATIVE MOLECULAR MASS

Total Gas	C_7+
21.7	102.4

VAPOUR PRESSURE (Pentanes +): 94.65 kPa

H2S g/m³: 0.00

AGAT® Laboratories

GAS ANALYSIS

Container Identification
17149

Operator Name	Laboratory Number
PETROLIA INC.	09GL376793C

Unique Well Identifier	Well Name
NOT AVAILABLE	PETROLIA - TAR POINT #1

Field or Area	Pool or Zone	Sampler's Company
ONTARIO	INDIAN COVE	HOLLAND TESTERS

Well License	Elevation	Test Type	Test No.	Name of Sampler
	KB m 38.36 GRD m 33.34	DST	4	

Test Interval or Perfs mKB		Sampling Point
2395.0-2405.0		BOTTOM HOLE SAMPLER
mKB		

	Separator	Reservoir	Source	Sampled	Received
Pressure (kPa)			140	140	70
Temperature			-2	-2	21

Date Sampled	Date Received	Date Analyzed	Date Reported	Entered By	Certified By
Dec 03, 2009	Dec 18, 2009	Dec 21, 2009	Dec 21, 2009	Gerry Ecker	Gerry Ecker

Other Information
BHS #5

* Results relate only to the items tested

Note: Sampling Point, Unique Well Identifier and/or Pool or Zone information was unavailable at time of reporting. This information is integral to AGAT's WebFLUIDs, a comparison, history and trending analysis system.

COMP	MOLE FRACTION		PETROLEUM LIQUID
	AIR FREE AS RECEIVED	AIR FREE ACID GAS FREE	mL / m³
H2	0.0019	0.0019	
He	0.0006	0.0006	
N2	0.0432	0.0433	
CO2	0.0027	0.0000	
H2S	0.0000	0.0000	
C1	0.6711	0.6730	
C2	0.1375	0.1379	
C3	0.0772	0.0774	283.7
IC4	0.0120	0.0120	52.4
NC4	0.0285	0.0286	119.9
IC5	0.0080	0.0080	39.1
NC5	0.0099	0.0099	47.9
C6	0.0048	0.0048	26.2
C7+	0.0026	0.0026	16.3
Total	1.0000	1.0000	585.5

GROSS HEATING VALUE MJ/m³
15° C AND 101.325 kPa

Air Free As Received	Moisture & Acid Gas Free	C7+, Air Free As Received
50.90	51.03	0.55

RELATIVE DENSITY (CALCULATED) DENSITY

Moisture Free	Moisture & Acid Gas Free	C7+, Moisture Free	C7+, Portion Whole Density	C7+ Density (kg/m3)	Total Sample Density(kg/m3)
0.827	0.825	3.553	0.009	691.9	1.013

PSEUDO CRITICAL PROPERTIES (CALCULATED)

As Sampled		Acid Gas Free	
pPc (abs) kPa	pTc K	pPc (abs) kPa	pTc K
4487.3	234.0	4479.6	233.8

RELATIVE MOLECULAR MASS

Total Gas	C_7+
24.0	102.9

VAPOUR PRESSURE (Pentanes +)

94.08 kPa

H_2S g/m³

0.00

ANNEXE 6

PERMIS

PLAN D'ARPENTAGE

Ressources naturelles et Faune
Québec

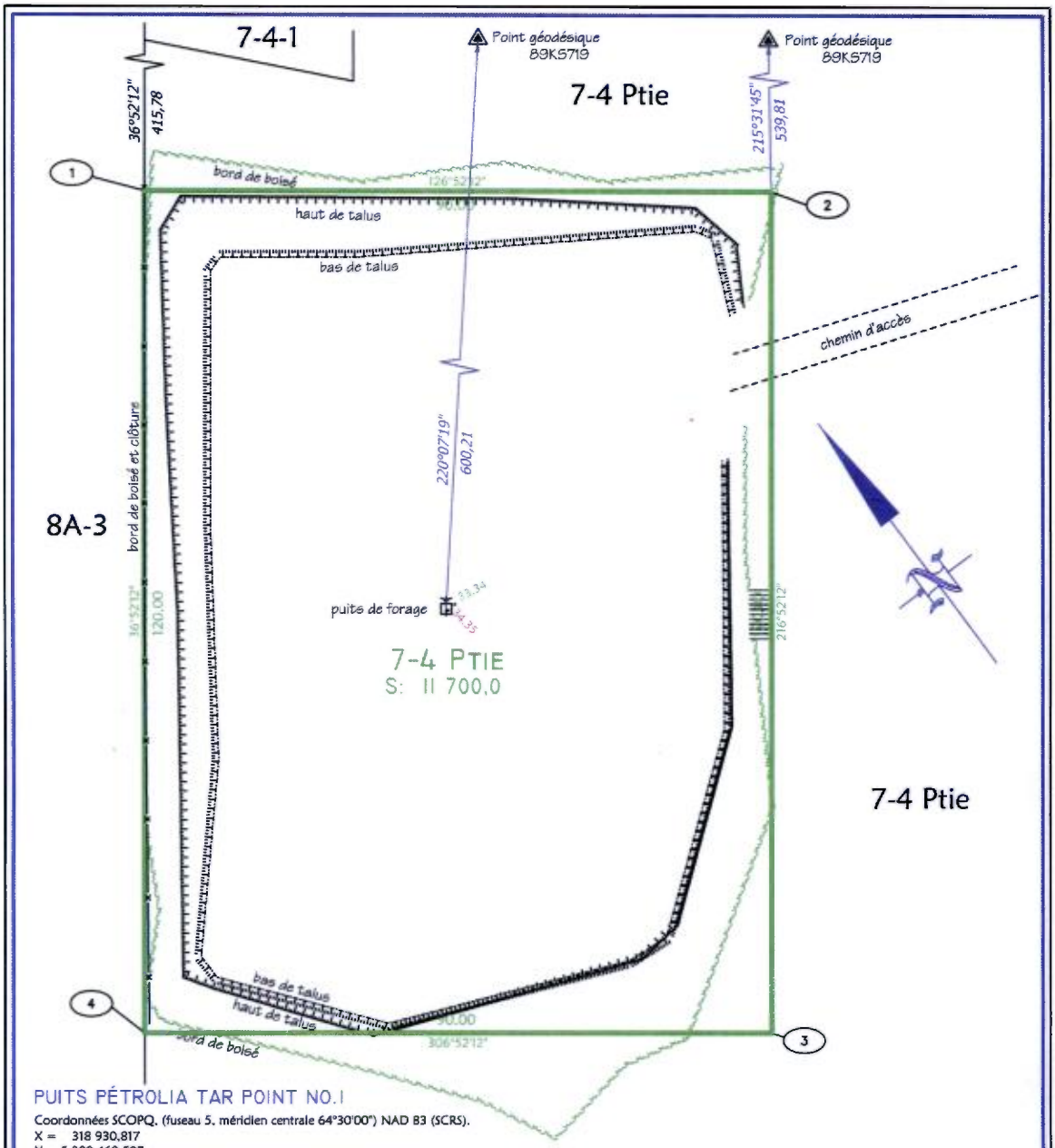
Permis de forage de puits
2009FC135

Nom du puits :	**Pétrolia, Tar Point No. 1**
Numéro du puits :	**2009FC135**
Date de délivrance :	**1 septembre 2009**
Permis de recherche :	**2005RS123**
Détenteur :	**Pétrolia inc.**
Opérateur :	**Pétrolia inc.**
Entrepreneur :	**Savanna Drilling # 635**
Région :	**(C) Gaspésie**

RESSOURCES NATURELLES
HYDROCARBURES
J.Y. LALIBERTÉ
INGÉNIEUR
FAUNE ET PARCS

Direction générale des hydrocarbures et des biocarburants
Permis délivré en vertu de la loi sur les mines (L.R.Q., chapitre M-13.1)

Jean-Yves Laliberté, ing.
Coordonnateur de l'exploration



PUITS PÉTROLIA TAR POINT NO.1

Coordonnées SCOPQ. (fuseau 5, méridien centrale 64°30'00") NAD 83 (SCRS).
X = 318 930.817
Y = 5 398 469.507

Coordonnées UTM. (fuseau 20, méridien centrale 63°00'00") NAD 83 (SCRS).
X = 403 805.883
Y = 5 397 444.858

Latitude : 48°48'21.72260"
Longitude : 64°18'28.53597"
Élévation géodésique du conducteur = 34.35
Élévation géodésique du sol = 33.34
Feuillet cartographique : 22A09-200-0201

COPIE CONFORME À L'ORIGINAL

Émise le : .....

Par : .....
ROBERT CONNOLLY, a.-g.

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Liste de coordonnées SCOPQ des coins de l'emplacement

Point	Nord (Y)	Est (X)
1	5 398 543.153	318 931.909
2	5 398 489.158	319 003.901
3	5 398 393.167	318 931.908
4	5 398 447.162	318 859.916

Les directions apparaissant sur ce document sont des gisements en référence au système SCOPQ (fuseau 5, méridien central 64°30'00") NAD 83 (SCRS). Date du levé : LE 30 SEPTEMBRE 2009

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Les dimensions indiquées ici sont en mètres (SI).

Échelle : 1 : 750
Dossier : 2282

Plan montrant la :
DESCRIPTION TECHNIQUE

Propriétaire(s) : **HARVEY ANNETT**

Lot(s) : **PARTIE DU LOT 7-4**
RANG 1 BOIS-BRULÉ

Cadastre officiel : **RÉVISÉ DU CANTON DE DOUGLAS**

Circonscription foncière : **GASPÉ**

Municipalité : **VILLE DE GASPÉ**

Signé à GASPÉ, le 5 octobre 2009

Par : .....
Minute : 1165 **ROBERT CONNOLLY** a.-g.

Roy, Roy & Connolly
Arpenteurs-Géomètres-Conseils
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ANNEXE 7

STRIPLOG