

OPERATOR

Company: IA OPERATING, INC.
 Address: 9915 W 21st ST.
 STE B
 WICHITA, KS 67205

Contact Geologist: JEFF MOWRY
 Contact Phone Nbr: (316) 721-0036

Well Name: MARVIN WUDTKE TRUST #34-1
 Location: SW SE NW NW 34-2-24
 Pool: API: 15-137-20690
 State: KANSAS Field: ELLA MAE
 Country: USA

Scale 1:240 Imperial

Well Name: MARVIN WUDTKE TRUST #34-1
 Surface Location: SW SE NW NW 34-2-24
 Bottom Location:
 API: 15-137-20690
 License Number: 33335
 Spud Date: 3/21/2014 Time: 10:45 AM
 Region: NORTON COUNTY
 Drilling Completed: 3/27/2014 Time: 4:58 PM
 Surface Coordinates: 1294' FNL & 739' FWL
 Bottom Hole Coordinates:
 Ground Elevation: 2458.00ft
 K.B. Elevation: 2466.00ft
 Logged Interval: 3150.00ft To: 3768.00ft
 Total Depth: 3770.00ft
 Formation: LANSING - KANSAS CITY
 Drilling Fluid Type: FRESH WATER / CHEMICAL GEL

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: -100.0172532 Latitude: 39.8386577
 N/S Co-ord: 1294' FNL
 E/W Co-ord: 739' FWL

LOGGED BY

Company: BIG CREEK CONSULTING, INC.
 Address: 1909 MAPLE
 ELLIS, KS 67637

Phone Nbr: (785) 259-3737
 Logged By: Geologist Name: JEFF LAWLER

CONTRACTOR

Contractor: DISCOVERY DRILLING
 Rig #: 3
 Rig Type: MUD ROTARY
 Spud Date: 3/21/2014 Time: 10:45 AM
 TD Date: 3/27/2014 Time: 4:58 PM
 Rig Release: 3/28/2014 Time: 5:00 PM

ELEVATIONS

K.B. Elevation: 2466.00ft Ground Elevation: 2458.00ft
 K.B. to Ground: 8.00ft

NOTES

AFTER LOG ANALYSIS DECISION WAS MADE TO RUN DST #4 & STRADDLE THE LKC D-F. ALTHOUGH THERE WAS A SLIGHT BOTTOM PACKER FAILURE, DUE TO LACK OF HYDROCARBON TRACE IN DST RECOVERY IT WAS ELECTED NOT TO RERUN THE STRADDLE TEST.

DUE TO STRUCTURAL POSITION AND LACK OF ECONOMICAL RECOVERY IT WAS SUGGESTED AND AGREED UPON TO PLUG AND ABANDON THE MARVIN WUDTKE TRUST #34-1.

WELL COMPARISON SHEET

FORMATION	MARVIN WUDTKETRUST #34-1				NE NW SW NE 34-2-24				SE NW NW NE 34-2-24				E2 SE SE SW 27-2-24				C SE SE 28-2-24							
	KB 2466		GL 2458		KB		2480		KB		2485		KB		2479		KB		2408					
	LOG TOPS		SAMPLE TOPS		COMP. CARD		LOG		SMPL.		COMP. CARD		LOG		SMPL.		COMP. CARD		LOG		SMPL.			
	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.
ANHYDRITE TOP	2015	451	2015	451	2028	452	- 1	- 1	2031	454	- 3	- 3	2036	443	+ 8	+ 8	1958	450	+ 1	+ 1				
BASE	2043	423	2044	422	2058	422	+ 1	+ 0					2065	414	+ 9	+ 8	1990	418	+ 5	+ 4				
TOPEKA	3247	-781	3248	-782	3263	-783	+ 2	+ 1	3266	-781	+ 0	- 1	3259	-780	- 1	- 2								
HEEBNER SHALE	3423	-957	3425	-959	3434	-954	- 3	- 5	3440	-955	- 2	- 4	3446	-967	+ 10	+ 8	3366	-958	+ 1	- 1				
TORONTO	3455	-989	3454	-988	3464	-984	- 5	- 4	3470	-985	- 4	- 3	3478	-999	+ 10	+ 11	3398	-990	+ 1	+ 2				
LKC	3471	-1005	3470	-1004	3478	-998	- 7	- 6	3485	-1000	- 5	- 4	3491	-1012	+ 7	+ 8	3414	-1006	+ 1	+ 2				
BKC	3655	-1189	3654	-1188	3669	-1189	+ 0	+ 1																
GRANITE WASH	3723	-1257	3723	-1257	3742	-1262	+ 5	+ 5	3741	-1256	- 1	- 1					3673	-1265	+ 8	+ 8				
GRANITE			3749	-1283					3755	-1270		- 13												
TOTAL DEPTH	3768	-1302	3770	-1304	3772	-1292	- 10	- 12	3768	-1283	- 19	- 21	3760	-1281	- 21	- 23	3710	-1302	+ 0	- 2				

DST #1 TORONTO - LKC C 3422' - 3510'



DRILL STEM TEST REPORT

IA Operating Inc. **34 - 2S - 24W Norton KS**
 9915 W 21ST ST. **Marvin Wudtke #34-1**
 STE B
 Wichita KS 67205
 ATTN: Jeff Lawler

Job Ticket: 56866 **DST#: 1**
 Test Start: 2014.03.25 @ 16:39:00

GENERAL INFORMATION:

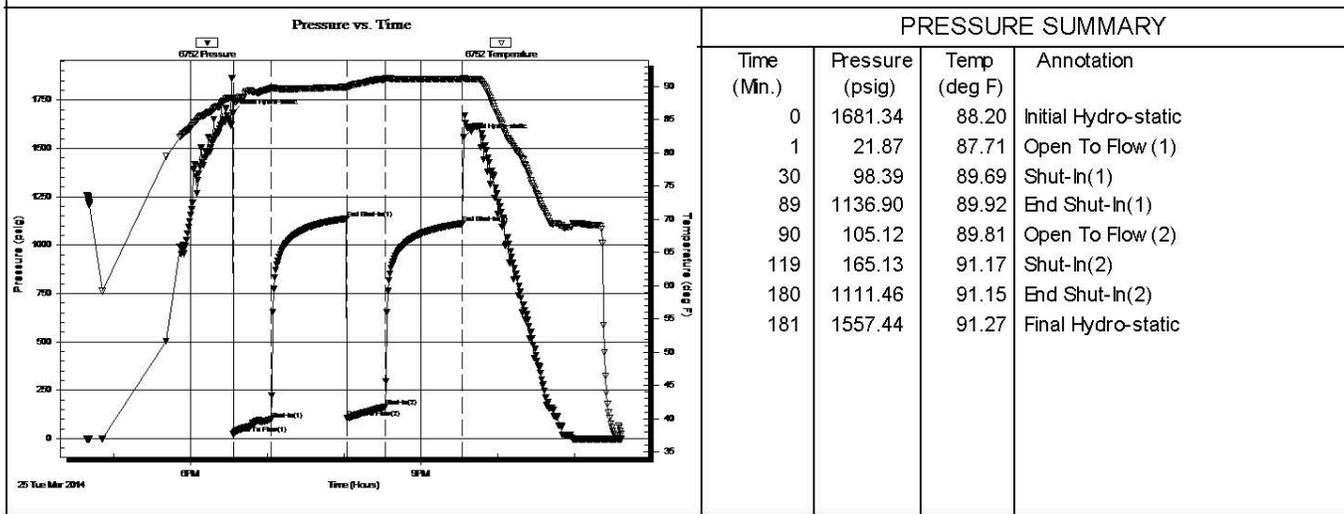
Formation: **Toronto - LKC " C "**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:33:20
 Time Test Ended: 23:37:09
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ryan Nichols
 Unit No: 58

Interval: **3422.00 ft (KB) To 3510.00 ft (KB) (TVD)**
 Total Depth: 3510.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Reference Elevations: 2466.00 ft (KB)
 2458.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 6752 Inside

Press@RunDepth: 165.13 psig @ 3423.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.03.25 End Date: 2014.03.25 Last Calib.: 2014.03.25
 Start Time: 16:39:01 End Time: 23:37:10 Time On Btm: 2014.03.25 @ 18:33:10
 Time Off Btm: 2014.03.25 @ 21:33:20

TEST COMMENT: 30 IF - 1/2 blow built to BoB @ 14 mins
 60 ISI - No return
 30 FF - Surface blow built to BoB @ 17 mins
 60 FSI - No return



Recovery

Length (ft)	Description	Volume (bbl)
315.00	WCM - 50%W - 50%M	4.14

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Trilobite Testing, Inc

Ref. No: 56866

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DST #2 LKC J-K 3580' - 3644'

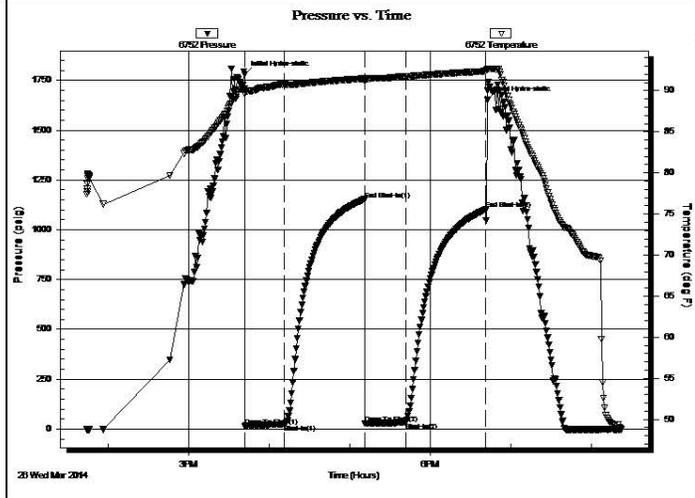
 <p>TRILOBITE TESTING, INC.</p>	<h2>DRILL STEM TEST REPORT</h2>	<p>34 - 2S - 24W Norton KS</p>
	<p>IA Operating Inc. 9915 W 21st ST. STE B Wichita KS 67205 ATTN: Jeff Lawler</p>	<p>Marvin Wudtke #34-1 Job Ticket: 56867 DST#: 2 Test Start: 2014.03.26 @ 13:44:00</p>

GENERAL INFORMATION:

Formation: LKC " J - K "	Test Type: Conventional Bottom Hole (Reset)
Deviated: No Whipstock: ft (KB)	Tester: Ryan Nichols
Time Tool Opened: 15:41:50	Unit No: 58
Time Test Ended: 20:23:00	Reference Elevations: 2466.00 ft (KB)
Interval: 3580.00 ft (KB) To 3644.00 ft (KB) (TVD)	2458.00 ft (CF)
Total Depth: 3644.00 ft (KB) (TVD)	KB to GR/CF: 8.00 ft
Hole Diameter: 7.88 inches Hole Condition: Good	

Serial #: 6752 Inside	Capacity: 8000.00 psig
Press@RunDepth: 34.67 psig @ 3581.00 ft (KB)	Last Calib.: 2014.03.26
Start Date: 2014.03.26 End Date: 2014.03.26	Time On Btm: 2014.03.26 @ 15:41:40
Start Time: 13:44:01 End Time: 20:23:00	Time Off Btm: 2014.03.26 @ 18:42:20

TEST COMMENT: 30 IF - Surface blow built to 1"
60 ISI - No return
30 FF - Surface blow started @ 4 mins died @ 5 mins
60 FSI - No return



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1779.94	90.29	Initial Hydro-static
1	14.61	89.59	Open To Flow (1)
30	23.94	90.80	Shut-In(1)
90	1152.60	91.49	End Shut-In(1)
90	26.80	91.21	Open To Flow (2)
120	34.67	91.73	Shut-In(2)
180	1101.46	92.37	End Shut-In(2)
181	1651.12	92.55	Final Hydro-static

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
35.00	Mud - 100%M	0.21

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

* Recovery from multiple tests

Trilobite Testing, Inc

Ref. No: 56867

Printed: 2014.03.27 @ 08:36:07

DST #3 PENNSYLVANIAN SAND - GRANITE WASH 3694' - 3740'

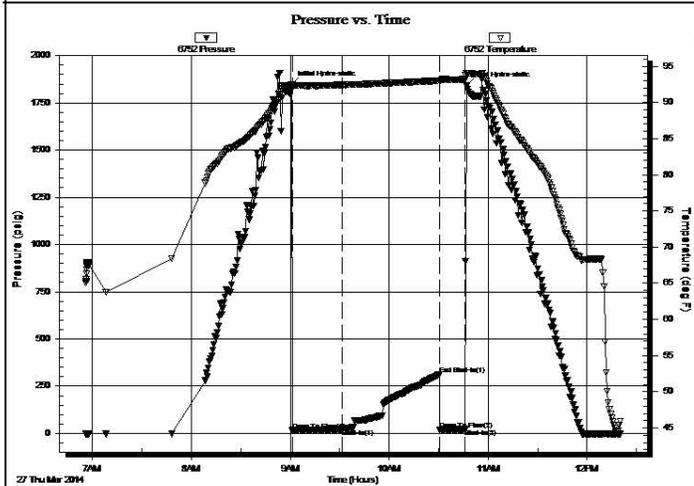
 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT	
	IA Operating Inc. 9915 W 21st ST. STE B Wichita KS 67205 ATTN: Jeff Lawler	34 - 2S - 24W Norton KS Marvin Wudtke #34-1 Job Ticket: 56868 DST#: 3 Test Start: 2014.03.27 @ 06:56:00

GENERAL INFORMATION:

Formation: Penn. Sand - Granite	Test Type: Conventional Bottom Hole (Reset)
Deviated: No Whipstock: ft (KB)	Tester: Ryan Nichols
Time Tool Opened: 09:01:10	Unit No: 58
Time Test Ended: 12:20:50	
Interval: 3694.00 ft (KB) To 3740.00 ft (KB) (TVD)	Reference Elevations: 2466.00 ft (KB)
Total Depth: 3740.00 ft (KB) (TVD)	2458.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good	KB to GR/CF: 8.00 ft

Serial #: 6752 Inside	Capacity: 8000.00 psig
Press@RunDepth: 22.61 psig @ 3695.00 ft (KB)	Last Calib.: 2014.03.27
Start Date: 2014.03.27 End Date: 2014.03.27	Time On Btm: 2014.03.27 @ 09:01:00
Start Time: 06:56:01 End Time: 12:20:50	Time Off Btm: 2014.03.27 @ 10:46:50

TEST COMMENT: 30 IF - 1/2" blow built to 3/4" @ 5 mins died back to 1/4"
 60 ISI - No return
 30 FF - No blow



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1846.89	92.36	Initial Hydro-static
1	14.49	91.97	Open To Flow (1)
31	22.61	92.43	Shut-In(1)
90	312.53	93.01	End Shut-In(1)
90	20.49	92.96	Open To Flow (2)
106	22.07	93.20	Shut-In(2)
106	1842.29	93.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

5.00	Mud 100% m	0.02

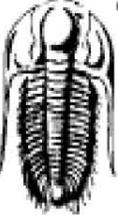
* Recovery from multiple tests

Trilobite Testing, Inc

Ref. No: 56868

Printed: 2014.03.27 @ 13:27:04

DST #4 LKC D-F (STRADDLE) 3506' - 3544'

 <p>TRILOBITE TESTING, INC</p>	DRILL STEM TEST REPORT	
	IA Operating Inc. 9915 W 21st ST. STE B Wichita KS 67205 ATTN: Jeff Lawler	34 - 2S - 24W Norton KS Marvin Wudtke #34-1 Job Ticket: 56869 DST#: 4 Test Start: 2014.03.28 @ 00:33:00

GENERAL INFORMATION:

Formation: **LKC " D - F "**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:05:30
 Time Test Ended: 07:53:20

Test Type: Conventional Straddle (Reset)
 Tester: Ryan Nichols
 Unit No: 58

Interval: **3506.00 ft (KB) To 3544.00 ft (KB) (TVD)**
 Total Depth: 3770.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good

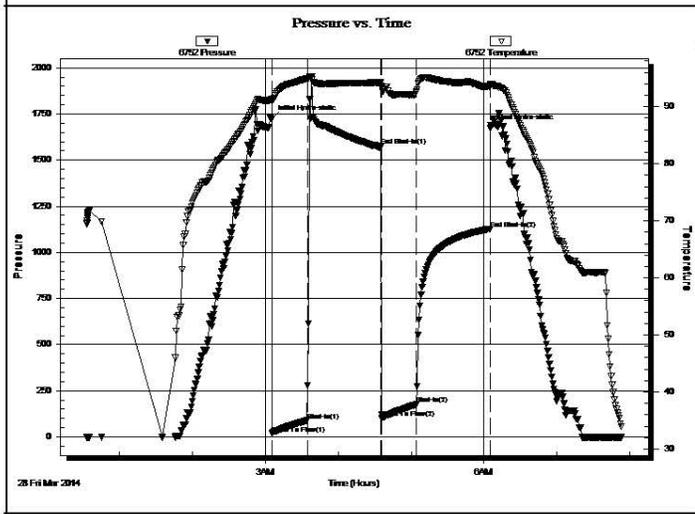
Reference Elevations: 2466.00 ft (KB)
 2458.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 6752 Inside

Press@RunDepth: 175.87 psig @ 3507.00 ft (KB)
 Start Date: 2014.03.28 End Date: 2014.03.28
 Start Time: 00:33:01 End Time: 07:53:20

Capacity: 8000.00 psig
 Last Calib.: 2014.03.28
 Time On Btm: 2014.03.28 @ 03:05:20
 Time Off Btm: 2014.03.28 @ 06:05:20

TEST COMMENT: 30 IF - 1" blow built to BoB @ 18 mins
 60 ISI - No return
 30 FF - 1" blow built to BoB @ 13 mins
 60 FSI - No return



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1723.57	91.34	Initial Hydro-static
1	17.76	90.93	Open To Flow (1)
29	88.66	94.93	Shut-In(1)
90	1575.67	94.22	End Shut-In(1)
91	99.96	93.36	Open To Flow (2)
120	175.87	92.68	Shut-In(2)
180	1127.35	93.62	End Shut-In(2)
181	1675.79	93.84	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
126.00	WCM - 40%W - 60%M	1.49

Gas Rates			
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

126.00	WCM - 50%W - 50%M	1.77
95.00	MCW - 5%M - 95%W	1.33

* Recovery from multiple tests

Trilobite Testing, Inc

Ref. No: 56869

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ROCK TYPES

 Lmst fw7>	 shale, gry	 shale, red	 Ss	 lg basic
 shale, grn	 Carbon Sh	 Shcol	 Igne	

ACCESSORIES

MINERAL

- P Pyrite
- . Sandy

FOSSIL

- ◇ Oolite

STRINGER

-  Dolomite
-  red shale

OTHER SYMBOLS

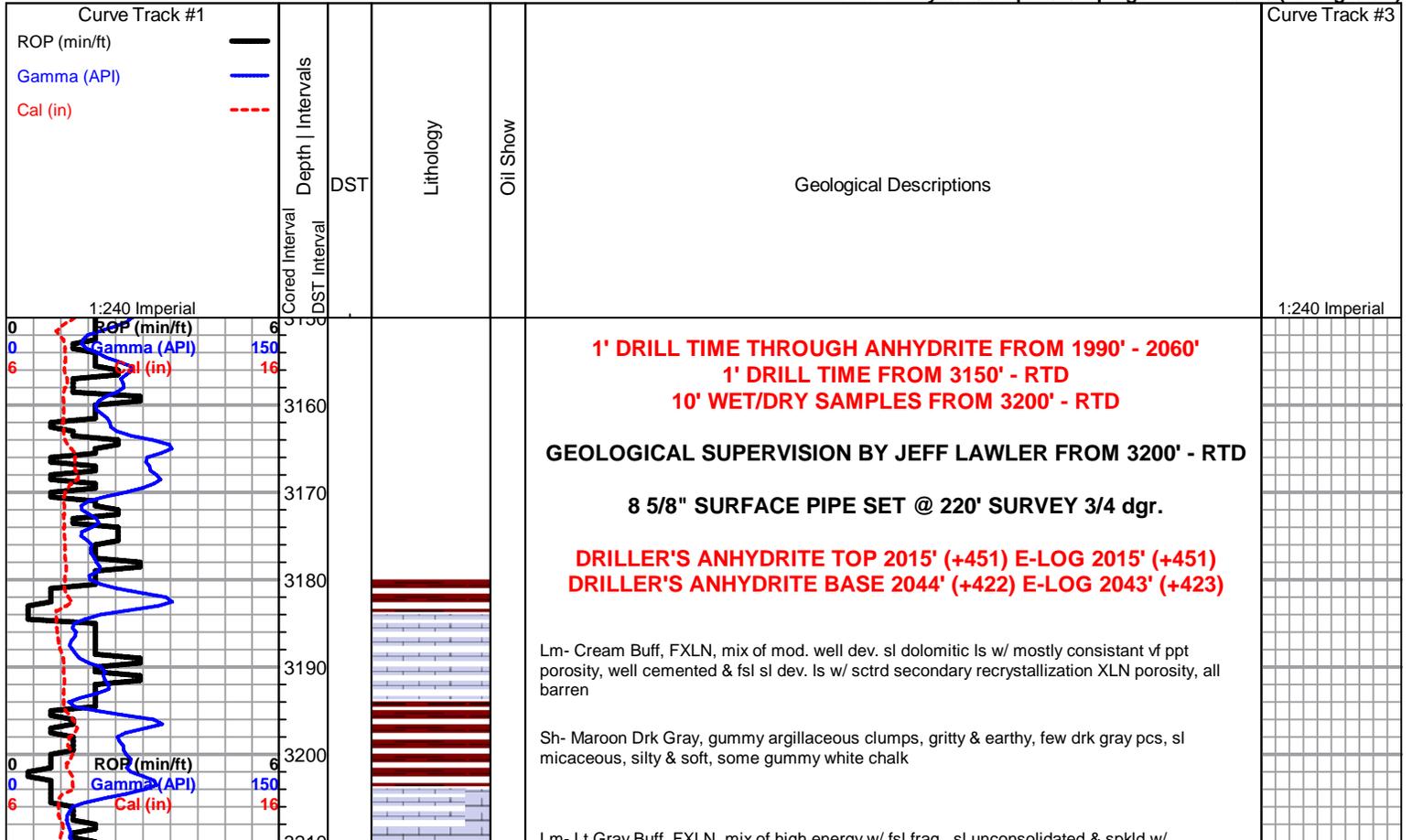
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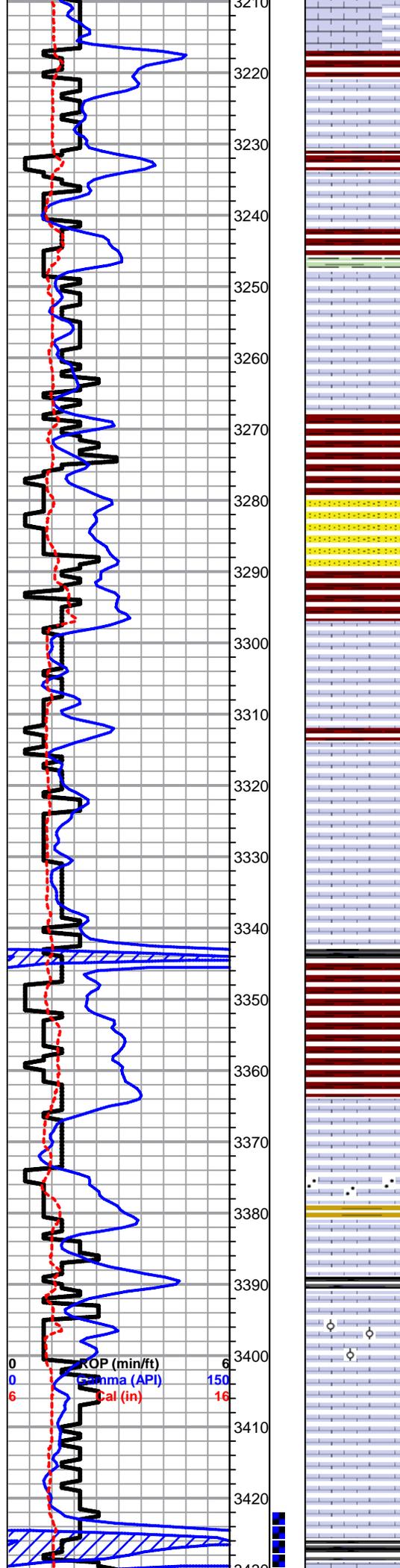
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-  Digital Photo
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-  Horizontal Log File
-  Core Log File
-  Drill Cuttings Rpt

DST

-  DST Int
-  DST alt

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Lm- Lt Gray Buff, F-XLN, mix of high energy w/ fsl frag., sl unconsolidated & spkld w/ glauconite, poor XLN porosity, some sl chalky in part & Cream FXLN, fsl w/ fusulinids, poorly dev. w/ sctrd XLN porosity, well cemented, barren

Lm- Cream Tan, mix of VFXLN, sub-sucrosic dolomitic ls, poorly dev. w/ vry fn ppt porosity, barren & VFXLN, fsl tight cherty ls w/ micro XLN porosity, barren

Lm- VFXLN, sl unconsolidated w/ maroon & ylw tint, tight, loosely cemented & chalky in part, to vry well cemented & tight

Sh- Maroon Lm Green Lt Gray White, gritty & earthy, some gummy arillaceous clumps, dense & waxy, gummy wash, soft white chalk

TOPEKA 3248' (-782) E-LOG 3247' (-781) Lm- Cream Lt Gray Buff, VF-FXLN, mix of sl unconsolidated w/ ylw tint, sl fsl & oolitic, poorly dev. & tight w/o vis. porosity, porcelain like, cream FXLN, oolitic & poorly dev. w/ minimal effective porosity, vry fn ppt & recrystallization porosity, barren

Lm- Cream Off White, FXLN, massive & sl granular, mod dev., few sl unconsolidated, loosely cemented & some sl chalky, poor vis. porosity, barren

Lm- Cream w/ Ylw Tint, sl unconsolidate w/ siliceous cementation, oolitic & fsl, poorly dev., vry well cemented & tight w/o vis. porosity, much soft white chalk

Ss/Sh- Clear to Frosted, Fn Grn, sub-rounded, consolidated & well sorted, some lt spkld w/ glauconite, constant intergranular porosity, loosely-well cemented, barren, Sh- Maroon Brown, gritty & earthy, sl chalky in part

Sh- Maroon Brown, gritty & earthy, gummy wash, few sl sandy, soft white chalk

Lm- Cream Off White, VF-FXLN, massive, fsl w/ dense fusulinids, few fsl frag., vry well cemented, poorly dev. w/ sparry cementation, apparent FXLN porosity, minimal effective porosity, barren, increasing amount of soft white chalk

Lm- Cream Off White, F-MED XLN, massive, mostly well cemented, sl dev. oolitic grainstone w/ sctrd sparry replacement cementation, some w/ poor effective porosity, some w/ fn ppt interoolite porosity, barren

Sh- Maroon Brick Red Drk Gray, gritty & earthy, silty & sl carbonaceous

Lm- Off White Cream, VF-FXLN, sl fsl, mostly tight & poorly dev. some w/ sctrd recrystallization porosity, most w/ micro XLN & XLN porosity, barren, vry clean

Lm- A/A w/ increasing amount of chalk

Sh- Black Maroon Brown, silty & carbonaceous, gritty & earthy

Lm- Cream, VF-MED XLN, fsl mix, some sl unconsolidated & chalky in part w/ fsl frag, poor vis. porosity & high energy fsl bioclastic w/ fsl frag, poor XLN & secondary recrystallization porosity, barren

Lm- Cream Off White, Vf-Fn Grn, dense, chalky unconsolidated, sl fsl, loosely cemented w/ poor vis. porosity

Lm- A/A w/ some arenaceous ls, poorly dev. & loosely cemented, sl trashy

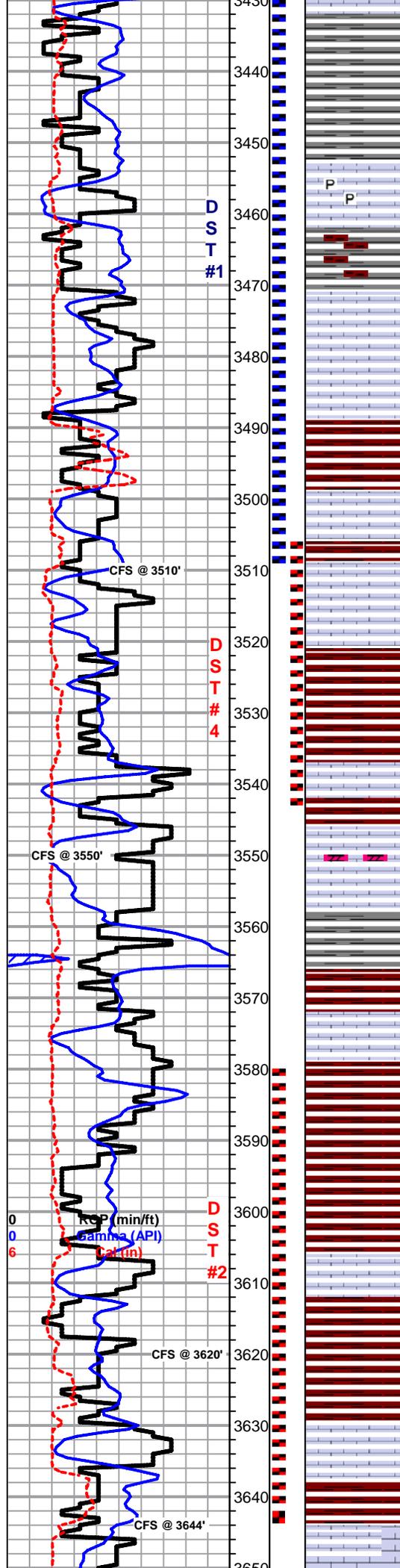
Sh- Black Drk Gray Maroon, soft & carbonaceous, silty & soft, gritty & earthy

Lm- Cream Off White, FXLN, vry well cemented, oolitic, poorly dev. w/ sparry cementation, micro XLN porosity, minimal effective porosity, barren

Lm- Cream Off White, VF-FXLN Fn Grn, dense, well cemented mix, all mostly tight w/ minimal vis. porosity, barren

Lm- Cream Off White, VF-FXLN, dense, well cemented, sl fsl, poorly dev. & tight w/ sctrd XLN porosity, several pcs of milky white fresh bedded chert

HEEBNER 3425' (-959) E-LOG 3423' (-957) Sh- Black Maroon Gray, silty & carbonaceous, gritty & earthy, gummy clumps



Sh- Gray Maroon, abundant gummy argillaceous clumps & maroon wash

TORONTO 3454' (-988) E-LOG 3455' (-989) Lm- Cream, F-MED XLN, mod. well dev. oolitic w/ sctrd ppt interoolite porosity, SCTRDR DRK STN, TR FO, FR OILY SHEEN, TR-WK ODR, SL INCREASING ODR W/ CRUSH, few pcs w/ pyrite inclusions, mixed w/ dense, vry well cemented FXLN, tight w/ minimal vis. porosity

Sh- Lt Gray Maroon, silty & soft, sl calcareous, much maroon wash

LKC 3470' (-1004) E-LOG 3471' (-1005) Lm- Cream Tan, VF-XLN, densely packed oolitic micrite, sctrd recrystallization, poor vis. porosity, sl cherty ls, barren

Lm- Cream Off White, F-MED XLN, mod. dev., oolitic w/ sctrd ppt interoolite porosity, loosely cemented in part, LT SCTRDR STN, FR OILY SHEEN, WK TR FO, FR ODR

Sh- Maroon Lm Green, gummy argillaceous clumps & wash

Lm- Cream Off White, F-CRS XLN, fsl, fusulinids & oolitic, mod. well dev. w/ mostly consistant fn ppt interoolite porosity & sctrd recrystallization porosity, some massive, LT SCTRDR STN, TR FO, GD OILY SHEEN, FR ODR, much gummy white chalk

Sh- Maroon, gritty & earthy

Lm- Cream Off White, FXLN, sl fsl, sctrd dev. from tight to sctrd fn ppt inter fsl porosity, vry well cemented, WK SCTRDR STN, SL OILY SHEEN, NSFO, WK ODR, few pcs of reworked high energy fsl cherty ls

Sh- Maroon Gray, gritty & earthy, gummy argillaceous clumps

Lm- Tan Cream, VF-FXLN, oolitic w/ sctrd dev. from densely packed oolitic biomicrite to mod. dev. w/ ppt inter oolite porosity, LT SCTRDR STN, TR FO, FEW GSY BUBBLES UPON CRUSH, OILY SHEEN, FNT ODR

Lm- Cream Tan, VF-FXLN, dense, mix of massive sub-sucrosic dolomitic ls w/ poor vis. porosity & mod dev. oolitic ls w/ sctrd fn ppt porosity, vry clean

Lm/Chert- Buff w/ Lt Green Tint, Vf Grn, dense, vry well cemented, tight w/o vis porosity, several pcs of fresh bedded chert

Sh- Lt Gray Maroon, gummy argillaceous clumps, gritty & earthy

Lm- Cream Off White, FXLN, sl fsl, sctrd dev. from mostly tight w/ sctrd micro XLN & XLN porosity to sctrd inter fsl porosity, WK SPOTTY STN, NO SFO, SL OILY SHEEN, FNT ODR

Sh- Maroon Lt Gray, gummy argillaceous clumps

Sh- A/A, abundant gummy argillaceous clumps

Lm- Cream Off White, mix of F-MED XLN Fn Grn, sl fsl & oolitic w/ fusulinids, sctrd dev. w/ XLN inter fsl porosity, WK SCTRDR STN, NO SFO, WK ODR, & loosely cemented, sub-sucrosic w/ consistant vry fn ppt porosity throughout, SAT DRK STN, SL SFO, HVY OILY SHEEN, FR ODR

Sh- Maroon, abundant gritty & earthy and gummy argillaceous clumps

Lm- Cream Off White, FXLN, sl fsl, poorly dev. & mostly tight w/ poor vis. porosity, some w/ sctrd secondary recrystallization porosity, barren

Sh- Maroon White, gritty & earthy, gummy argillaceous clumps & soft white chalk

Lm- White Cream, VF-FXLN, sl fsl, poorly dev. & mostly tight w/ sctrd micro XLN & XLN porosity, barren, vry well cemented

SHORT TRIP SURVEY 1 dgr

DST #1 TORONTO - LKC C 3422' - 3510'

30-60-30-60

315' WCM (50% W, 50% M)

IFP: 22-98#
FFP: 105-165#
SIP: 1137-1111#
BHT: 91 dgr
Rw: .452 @ 38 dgr
CHLOR: 27,000

DST #4 (STRADDLE) LKC D-F 3506' - 3544'

30-60-30-60

347' TOTAL FLUID
126' WCM (40% W, 60% M)
126' WCM (50% W, 50% M)
95' MCW (5% M, 95% W)

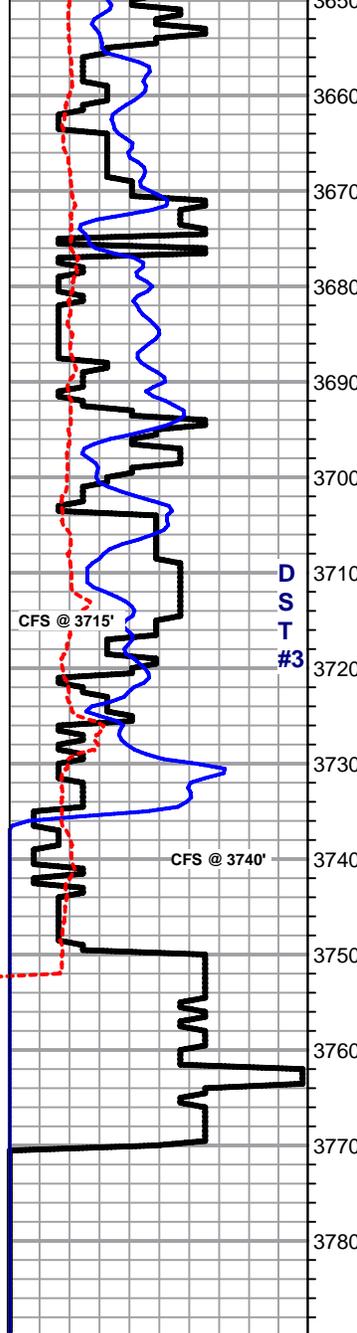
** PRESSURES NOT VALID BOTTOM PACKER FAILURE SEE CHARTS BELOW **

IFP: 17-88#
FFP: 99-175#
SIP: 1575-1127#
HYD: 1723-1675#
BHT: 94 dgr
Rw: .3 @ 36 dgr
CHLOR: 50,000

DST #2 LKC J-K 3580' - 3644'

30-60-30-60

35' MUD
IFP: 15-24#
FFP: 27-35#
SIP: 1153-1101#
BHT: 92 dgr



Lm- Cream w/ Maroon tint, sl conglomerate oolitic ls, tight w/o vis. porosity, barren

BKC 3654' (-1188) E-LOG 3655' (-1189) Sh- Maroon, gritty & earthy, some dense & sl waxy, Ss- Frosted, Vf Grn, sl unconsolidated & well sorted, Ca cementation, few sl spkld w/ glauconite, sub-rounded, barren

Lm- Cream Off White, FXLN, dense, poorly dev. fsl & oolitic, most loosely cemented, few chalky in part, sctrd XLN porosity, few pcs mod. well dev. w/ sctrd fn ppt interoolite porosity, all barren

Sh- Maroon, gritty & earthy, some brown wash Ss- Mint Green, Vf Grn, sl shaley, loosely cemented, sub-rounded, barren

Lm- Tan Off White, VF-FXLN, dense, well cemented, mostly tight w/ poor vis. porosity, few pcs unconsolidated w/ med. grn, rounded qtz. inclusions, vry well cemented w/o vis. porosity

Ss- White Frosted, Fn-Med Grn, unconsolidated, heavy cementation, loosely cemented & crumbly, sub-angular to sub-rounded, SCTRD DRK STN, NO SFO, LT OILY SHEEN, DULL-BRIGHT YLW FLOR., SL HALO FLOR. NO ODR, few pcs of mod. well dev. dolomitic ls w/ sctrd ppt porosity, DRK SCTRD STN, SL SFO, NO ODR

Lm- Cream w/ Maroon Tint, well cemented conglomerate ls w/o vis. porosity Sh- Maroon Purple, many gummy argillaceous clumps

Ss- Clear Frosted, Fn-Med Grn, mix of many angular individual grains & clusters w/ mod. cementation & spkld w/ glauconite, SOME W/ SCTRD DRK STN, SL OILY SHEEN, NO SFO, NO ODR, DULL YLW FLOR

GRANITE WASH 3723' (-1257) E-LOG 3723' (1257) weatherd qtz. & feldspar w/ fractures, 1-2 pcs w/ TARRY BLK DEAD OIL along edge planes, NO SFO, NO ODR

Qtz & feldspar A/A w/ increasing amount of mica & fractures

GRANITE 3749' (-1283) Granite- Pink Clear, fresh unweathered qtz & feldspar w/ heavy mica speckling

A/A

RTD 3770' (-1304) LTD 3768' (-1302) @ 16:58 3/27/2014

DST #4_BTM_PKR.jpg

DST #3
 PENN. SAND -
 GRANITE WASH
 3694' - 3740'
 30-60-15-0
 5' MUD
 IFP: 14-22#
 FFP: 20-22#
 SIP: 312 - N/A
 BHT: 94 dgr

SURVEY 1dgr

