



Directional Survey Details

RED HILLS AGI #1

HOBBS OCD
FEB 06 2018
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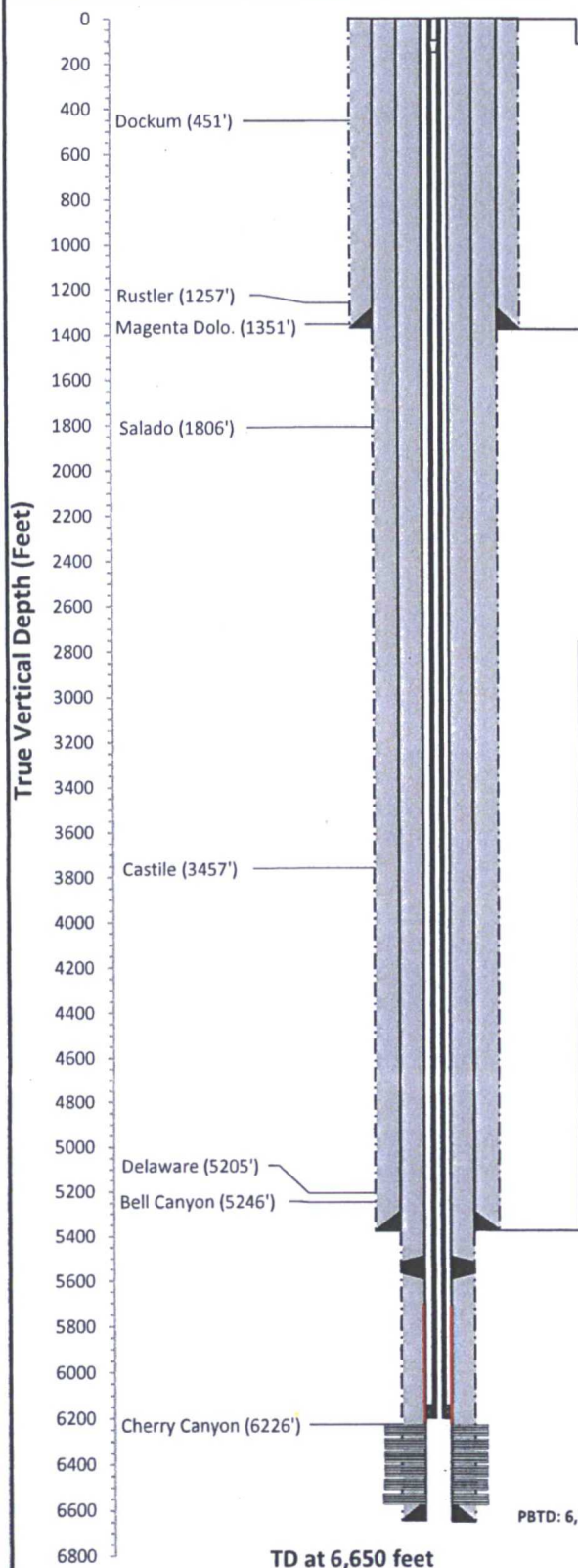
Description	Date	MD Tie In (ftKB)	TVD Tie In (ftKB)	Inclination Tie In (")	Azimuth Tie In (")	NS Tie In (ft)	EW Tie In (ft)	VS Tie In (ft)
MWD Survey	10/21/2013 07:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wellbore Name	Deviation Survey Attached			Hole Direction		VS Dir (")		Start Depth (ftKB)
Original Hole	General Rig Survey			VERTICAL				18.5
Comment	Job							

Survey Data										
Date	MD (ftKB)	Incl (")	Azm (")	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	BRN (°/100ft)	Survey Company
10/28/2013 16:00	1,392.00	0.20	346.80							ROLFSON
10/28/2013 19:00	1,582.00	1.00	339.60							ROLFSON
10/28/2013 21:45	1,771.00	1.00	346.40							ROLFSON
10/29/2013 00:45	1,961.00	1.30	356.70							ROLFSON
10/29/2013 02:45	2,055.00	1.70	0.20							ROLFSON
10/29/2013 04:30	2,150.00	1.50	349.60							ROLFSON
10/29/2013 06:00	2,246.00	1.60	340.60							ROLFSON
10/29/2013 09:00	2,338.00	1.90	341.50							ROLFSON
10/29/2013 13:30	2,433.00	1.60	344.00							ROLFSON
10/29/2013 17:15	2,621.00	1.70	339.40							ROLFSON
10/29/2013 20:15	2,810.00	2.10	340.30							ROLFSON
10/29/2013 22:15	2,873.00	2.30	339.40							ROLFSON
10/30/2013 02:00	2,998.00	2.60	338.00							ROLFSON
10/30/2013 14:30	3,093.00	2.30	6.40							ROLFSON
10/30/2013 16:45	3,188.00	1.30	37.00							ROLFSON
10/30/2013 20:30	3,377.00	1.60	43.00							ROLFSON
10/30/2013 23:45	3,566.00	2.50	50.50							ROLFSON
10/31/2013 03:15	3,661.00	1.90	78.50							ROLFSON
10/31/2013 12:45	3,850.00	1.60	92.50							ROLFSON
10/31/2013 19:45	4,040.00	1.60	115.40							ROLFSON
11/1/2013 01:00	4,229.00	1.70	137.50							ROLFSON
11/1/2013 06:15	4,418.00	1.70	140.70							ROLFSON
11/1/2013 09:15	4,607.00	4.40	0.00							ROLFSON
11/1/2013 16:00	4,702.00	3.30	150.60							ROLFSON
11/1/2013 17:45	4,796.00	3.30	165.10							ROLFSON
11/2/2013 02:00	4,965.00	0.90	182.40							ROLFSON
11/2/2013 07:15	5,174.00	0.70	179.80							ROLFSON
11/2/2013 09:45	5,253.00	0.70	179.20							ROLFSON
11/2/2013 11:30	5,299.00	0.80	187.60							ROLFSON
11/6/2013 08:30	5,520.00	0.90	0.00							ROLFSON
11/6/2013 12:00	5,740.00	0.70	0.00							ROLFSON
11/6/2013 19:00	6,150.00	0.40	0.00							ROLFSON
11/7/2013 03:30	6,580.00	0.50	0.00							ROLFSON

Lucid Energy Red Hills AGI #1 Well Schematic

Well Name: Red Hills AGI #1
 API: 30-025-40448
 STR: Sec. I-13, T24S-R33E
 County, St. Lea County, New Mexico

Footage 1600' FSL & 150' FEL
 Well Type AGI Exploratory Cherry Canyon
 KB/GL: 3592.5/3574
 Lat, Long: 32.214586, -103.517520



20" CONDUCTOR PIPE to 40 ft.

13 3/8" SURFACE CASING to 1,372 ft.

17.5" OH

13 3/8", 48 #/ft., H-40, STC
 Cmnt to surface - 90 bbls returned
 Lead Cmnt: 820 sx C Lite
 Tail Cmnt: 180 sx Class C

SSSV @ 255'

9 5/8" INTERMEDIATE CASING to 5,346 ft.

12.25" OH

9 5/8", 40 #/ft., J-55, LT&C 0-100'
 9 5/8", 36 #/ft., J-55, LT&C 100-3,300'
 9 5/8", 40 #/ft., J-55, LT&C 3,300'-4,200'
 9 5/8", 40 #/ft., HCK-55, LT&C 4,200'-5,346'
 Cmnt to surface - 60 bbls returned
 Lead Cmnt: 1,280 sx C Lite
 Tail Cmnt: 180 sx Class C

7" PRODUCTION CASING to 6,650 ft.

8.75" OH

7" 26 #/ft., L80, LT&C from 0'-5,702'
 w/ 7" G-3, 26 #/ft. VAMTOP, from 5,702'-6,239'
 7" 26 #/ft., L80, LT&C from 6,239' - 6,650'
 Cmnt to surface both stages - 1.5 bbls
 Stage 1 - Lead: 250 sx EverCrete
Stage Tool in 7-in casing @ 5,539'
 Stage 2 - Lead: 490 sx C Lite
 Stage 2 - Tail: 100 sx Class C

TUBING AND EQUIPMENT

Halliburton Retrievable SSSV set @ 255 ft.
 3.5", 9.3 #/ft, L80, EUE 8RD from 0'-5,859'
 3.5", SM2550, VAMTOP from 5,859'-6,161'
 BHGE Bottom Hole P/T Gauge set above packer @ 6,179'
 Permanent Production-Packer set @ 6,187'
 Annulus filled w/ diesel mixed with corrosion inhibitor/biocide

PERFORATIONS

Primary Target:
 Upper Cherry Canyon (6 spf @ 60°)
 6,230' - 6,250'
 6,260' - 6,280'
 6,295' - 6,335'
 6,355' - 6,380'
 6,400' - 6,415'
 6,435' - 6,500'
 6,525' - 6,583'

PBTD: 6,635'

TD at 6,650 feet

Schematic is properly scaled

Prepared For:



Prepared By:

GEOLEX
 INCORPORATED



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GEOLEX, INC.

AGAVE ENERGY Co. - RED HILLS AGI # 1

11/21/2013

QUALITY CONTROL RERUN DATA

Sample No.	GRAIN DENSITY		POROSITY		<i>k</i> standard Test Sample	PERMEABILITY	
	original	reruns	original	reruns		original	reruns
4	2.707	2.707	0.52	0.53	2.805	0.003	0.003
9	2.708	2.708	6.54	6.51		<.001	<.001
16	2.662	2.663	21.25	21.28		38.396	36.288
21	2.681	2.680	20.07	20.05		1.532	1.538
27	2.655	2.653	24.10	24.07		11.782	12.176
32	2.807	2.807	4.13	4.15		0.005	0.004
37	2.666	2.665	15.10	15.06		0.489	0.469
42	2.819	2.818	5.26	5.22		<.001	<.001
47	2.674	2.674	16.39	16.37		0.598	0.595
52	2.694	2.695	9.15	9.18	2.781	0.019	0.020



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ROTARY SIDEWALL CORE ANALYSIS REPORT

FOR

GEOLEX, INC.

AGAVE ENERGY CO. – RED HILLS AGI # 1

LEA COUNTY, NEW MEXICO

GEOLEX, INC.
AGAVE ENERGY CO. – RED HILLS AGI # 1
LEA COUNTY, NEW MEXICO
U.S.A.
File: MD-68047



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November 27, 2013

GEOLEX, INC.

500 Marquette Avenue, NW, Suite 1350
Albuquerque, NM. 87102

Attn: ALBERTO GUTIERREZ

RE: AGAVE ENERGY CO. – RED HILLS AGI # 1
Rotary Sidewall Core Analysis

Mr. GUTIERREZ:

The core analysis data from the above referenced well is enclosed in the following pages.

All quality control data is enclosed in a separate section of the report. The data, results, and digital images will be maintained in our files for your future reference. If you have any questions regarding our results or procedures, please do not hesitate to contact us. We appreciate the opportunity to analyze the core from the above referenced well and look forward to working with you again in the future.

DISTRIBUTION

GEOLEX, INC.

Attn: ALBERTO GUTIERREZ, RG
500 Marquette Avenue, NW, Suite 1350
Albuquerque, NM. 87102
5 Copies of the Report with Photographs and 5 USB Drives

MAZZULLO ENERGY CORP.

Attn: LOUIS J. MAZZULLO, CPG
31078 Big Bear Drive
Evergreen, CO. 80439-9679
1 Copy of the Report with Photographs and 1 USB Drive

Sincerely,

Wayne Helms, General Manager
Weatherford Laboratories

GEOLEX, INC.

AGAVE ENERGY CO. – RED HILLS AGI # 1
LEA COUNTY, NEW MEXICO
U.S.A.
File:MD-68047



CORE ANALYSIS PROCEDURES

FOR

GEOLEX, INC.

AGAVE ENERGY CO. – RED HILL AGI # 1

LEA COUNTY, NEW MEXICO

The Rotary Sidewalls were picked up by Weatherford Laboratories.

Gases from the Sidewalls were measured by Hot Wire Chromatography and reported in Gas Units.

A brief Lithological Description of the Sidewalls was recorded.

A description of the Fluorescence of the Sidewalls was recorded.

Ultraviolet Light Photographs were taken of the Sidewalls for a permanent record.

Natural Light Photographs were taken of the Sidewalls for a permanent record.

Composite Photographs of the Sidewall End Trims were taken under Natural and Ultraviolet Light.

The Sidewalls were extracted utilizing the Dean Stark method.

The fluids were measured by the Dean Stark method.

Porosities were measured in a Boyle's Law Porosimeter utilizing Helium.

Permeabilities were measured in a Hassler Sleeve Permeameter utilizing Nitrogen at 300 psi confining pressure.

Test samples of a known permeability were measured before and after the Sidewall permeabilities were measured.

GEOLEX, INC.
AGAVE ENERGY CO. – RED HILLS AGI # 1
LEA COUNTY, NEW MEXICO
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LITHOLOGICAL ABBREVIATIONS

Anhydrite (-ic)	anhy, anhyd	Filled	fd	Poor	pr
Anhydrite inclusion	A/I	Fine (-ly)	f, fnly	Pyrite	pyr
Bentonite (-ic)	bent	Fluorescence	flu	Quartz (-itic)	qtz
Black (-ish)	blk, blksh	Fossil (-iferous)	foss	Red	rd
Bleeding Oil	B/O	Fracture	frac	Round	rnd
Brecciated	brec	Fragments	frag	Residual Oil	So
Bright	brt	Friable	fri	Residual Water	Sw
Brittle	brit	Fusulinid	fus	Sample	Spl
Broken	brkn	Gilsonite	gil	Sandstone	Ss
Brown	brn	Gold	gld	Sandy	sdly
Buff	bf	Good	gd	Scattered	sc
Calcite (-ic)	calc, calctc	Grain (-s)	gr	Shaley	shy
Calcareous	calc	Granular	gran	Shale	sh
Carbonaceous	carb	Gray	gy	Shale parting	s/p
Cement	cmt	Gypsum	gyp	Silt (-y)	slt, slty
Chalk (-y)	chk, chky	Hair line(frac)	hl	Slight (-ly)	sli, s
Chert	cht	Halite	hal	Small	sml
Clay	cl	Inclusion	incl	Spotted (-y)	sp
Coal	c	Laminations (ated)	lam	Stringer	strgr
Coarse	crs	Large	lrg	Stylolite (-itic)	sty, styl
Conglomerate	cgl	Light	lt	Subround	sbrnd
Consolidated	consol	Limestone	ls	Subangular	sbang
Contaminated	contam	Limey	lmy	Sucrosic	suc
Crinoid (-al)	crin, crinal	Lithology	lith	Sulphur	su
Cross-bedded	x-bd	Medium	m	Tan	tn
Crystal (-line)	Xl, xln	Mineral Fluorescence	mf	Too broken (for Analysis)	tbfa
Dark	dk	Moderate	mod	Thin	thn
Dense	dns	Mudcake	m/c	Trace	Tr
Diameter	dia	No Show	N/S	Tripolitic	trip
Dolomite (ic)	dol, dolm	Oolite (-itic)	ool	Very	v
Dull	dl	Pale	pl	Vertical	vert, vt
Faint	fnt	Permeability	Perm, K	Vug (-gy)	vug
Fair	fr	Pin-Point Porosity	ppp		



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ROTARY SIDEWALL CORE ANALYSIS
RECEIVED
FEB 06 2018
HILLS OGD

GEOLEX, INC.
AGAVE ENERGY Co. - RED HILLS AGI # 1
LEA COUNTY, NEW MEXICO

A.P.I. NUMBER : 30-025-40448
FIELD : Exploratory (Cherry Canyon)
LOCATION: 1600' FSL, 150' FEL,
Section 13, T-24-S, R-33-E

FILE NO. : MD-68047
DATE : November 21, 2013
ANALYSTS : WH, SB, JR

DEAN STARK EXTRACTION

SAMPLE NO.	DEPTH ft	GRAIN DENSITY	POR %	PERM mD	SATURATIONS Sw	So	GAS UNITS	FLUORESCENCE %	LITHOLOGY
1	6021.0	2.68	4.7	0.026	83.4	0.0	0	0	Mf Ss gy-tn-opaq vf-fgr sbang-sbrnd vcalc sc slty intrbd lam
2	6055.0	2.69	4.2	0.064	82.5	0.0	0	0	Mf Ss gy-tn-opaq vf-fgr sbang-sbrnd vcalc tr slty intrbd
3	6063.0	2.70	1.2	0.077	91.1	0.0	0	0	DI mf Ls dk gy-gy-tn sslty sc slty intrbd
4	6068.0	2.71	0.5	0.003	60.5	0.0	0	0	DI mf Ls gy-tn sslty sc slty intrbd tr hl frac
5	6078.0	2.72	17.4	0.174	84.9	0.0	0	0	DI yl mf Ls tn-crm sucro sslty sc slty intrbd abd sc sml vug ool
6	6089.0	2.71	16.4	0.109	87.9	0.0	0	0	DI yl mf Ls tn-crm sucro sslty sc slty intrbd abd sc sml vug ool
7	6151.0	2.70	2.7	0.070	74.0	0.0	0	0	DI yl mf Ls gy-tn sslty sc slty intrbd abd sc calc fd vug ool
8	6157.0	2.71	2.0	0.031	67.6	0.0	0	0	DI yl mf Ls gy-tn sslty sc slty intrbd sc calc fd vug frac
9	6170.0	2.71	6.5	<.001	52.5	0.0	0	0	DI yl mf Ls tn-crm sslty sc slty intrbd sc calc fd vug ool foss
10	6196.0	2.69	6.0	tbfa	81.4	0.0	5	20	DI brn Sh blk-dk gy-gy sslty sc slty intrbd sc bent intrbd sc pyr
11	6232.0	2.68	11.6	0.312	82.3	0.0	0	0	Ss gy-tn-opaq vf-fgr sbang-sbrnd vcalc sc slty intrbd
12	6239.0	2.68	19.0	3.269	88.5	0.0	1	0	Ss gy-tn-opaq vf-fgr sbang-sbrnd scalc sc slty intrbd tr hal
13	6247.0	2.66	20.4	3.099	92.3	0.0	0	0	Ss gy-tn-opaq vf-fgr sbang-sbrnd mcalc sc slty intrbd sc hal
14	6255.0	2.71	1.0	0.076	69.2	0.0	0	0	DI mf Ls gy-tn sslty sc slty intrbd sc calc fd vug ool
15	6266.0	2.77	24.2	tbfa	65.6	0.0	0	0	DI mf Ss gy-tn-opaq vf-fgr sbang-sbrnd vcalc sc slty intrbd
16	6270.5	2.66	21.2	38.396	88.9	0.0	0	0	DI mf Ss gy-tn-opaq vf-fgr sbang-sbrnd vcalc sc slty intrbd tr hal
17	6277.0	2.68	16.9	0.841	90.1	0.0	0	0	DI mf Ss gy-tn-opaq vf-fgr sbang-sbrnd scalc sc slty intrbd tr hal
18	6289.0	2.69	7.9	0.049	86.2	0.0	0	0	DI mf Ss gy-tn-opaq vf-fgr sbang-sbrnd vcalc sc slty intrbd sc hal
19	6300.0	2.71	4.0	0.036	85.7	0.0	0	0	DI mf Ss gy-tn-opaq vf-fgr sbang-sbrnd vcalc sc slty intrbd sc hal
20	6309.5	2.67	20.4	1.386	93.5	0.0	0	0	Ss tn-gy-opaq vf-fgr sbang-sbrnd mcalc sc slty intrbd sc hal



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LABORATORIES

GEOLEX, INC.
AGAVE ENERGY Co. - RED HILLS AGI # 1
LEA COUNTY, NEW MEXICO

A.P.I. NUMBER : 30-025-40448
FIELD : Exploratory (Cherry Canyon)
LOCATION: 1600' FSL, 150' FEL,
Section 13, T-24-S, R-33-E

FILE NO. : MD-68047
DATE : November 21, 2013
ANALYSTS : WH, SB, JR

DEAN STARK EXTRACTION

SAMPLE NO.	DEPTH ft	GRAIN DENSITY	POR %	PERM mD	SATURATIONS Sw	So	GAS UNITS	FLUORESCENCE %	LITHOLOGY
21	6320.0	2.68	20.1	1.532	93.7	0.0	0	0	Ss tn-gy-opaq vf-fgr sbang-sbrnd mcalc sc slty intrbd sc hal
22	6330.0	2.68	19.5	1.072	93.0	0.0	0	0	Ss tn-gy-opaq vf-fgr sbang-sbrnd scalc tr slty intrbd sc hal
23	6340.0	2.68	16.9	0.894	93.0	0.0	0	0	Ss tn-gy-opaq vf-fgr sbang-sbrnd scalc tr slty intrbd sc hal
24	6350.0	2.71	4.8	0.037	76.9	0.0	0	0	Ss tn-gy-opaq vf-fgr sbang-sbrnd vcalc sc slty intrbd sc hal
25	6358.0	2.67	18.6	0.925	93.5	0.0	0	0	Ss tn-gy-opaq vf-fgr sbang-sbrnd scalc sc slty intrbd sc hal
26	6365.0	2.69	16.6	2.184	91.2	0.0	1	0	Ss tn-gy-opaq vf-fgr sbang-sbrnd scalc sc slty intrbd lam sc hal
27	6370.5	2.65	24.1	11.782	95.6	0.0	0	0	Ss tn-gy-opaq vf-fgr sbang-sbrnd scalc tr slty intrbd sc hal
28	6381.0	2.72	1.1	0.022	75.2	0.0	0	0	DI mf Ls gy-tn sslty sc slty intrbd tr calc fd frac
29	6404.0	2.67	15.4	9.465	89.7	0.0	0	0	Ss tn-gy-opaq vf-fgr sbang-sbrnd scalc tr slty intrbd sc hal
30	6410.0	2.68	14.8	2.269	90.8	0.0	0	0	Ss tn-gy-opaq vf-fgr sbang-sbrnd scalc tr slty intrbd sc hal
31	6420.0	2.77	4.1	0.015	91.5	0.0	0	0	DI mf Dol gy-tn sslty sc slty intrbd tr sml vug
32	6430.0	2.81	4.1	0.005	84.7	0.0	9	0	DI mf Dol gy-tn sslty sc slty intrbd tr sml vug sc A/I
33	6440.0	2.66	18.4	3.390	91.0	0.0	0	0	Ss gy-tn-opaq vf-fgr sbang-sbrnd scalc tr slty intrbd tr hal
34	6450.0	2.66	20.6	9.099	92.1	0.0	0	0	Ss gy-tn-opaq vf-fgr sbang-sbrnd mcalc tr slty intrbd sc hal
35	6460.0	2.66	23.2	2.325	93.3	0.0	0	0	Ss gy-tn-opaq vf-fgr sbang-sbrnd mcalc tr slty intrbd sc hal
36	6469.0	2.66	18.8	1.909	92.2	0.0	0	0	Ss gy-tn-opaq vf-fgr sbang-sbrnd scalc tr slty intrbd sc hal
37	6470.0	2.67	15.1	0.489	93.1	0.0	0	0	Ss gy-tn-opaq vf-fgr sbang-sbrnd scalc tr slty intrbd tr hal
38	6480.0	2.67	19.2	0.657	89.5	0.0	0	0	Ss gy-tn-opaq vf-fgr sbang-sbrnd mcalc tr slty intrbd sc hal
39	6490.0	2.67	21.3	0.892	92.3	0.0	0	0	Ss gy-tn-opaq vf-fgr sbang-sbrnd scalc tr slty intrbd tr hal
40	6508.0	2.84	5.2	0.049	81.7	0.0	0	0	DI yl mf Dol gy-tn sslty sc slty intrbd sc A/I nod



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LEA COUNTY, NEW MEXICO

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FIELD : Exploratory (Cherry Canyon)
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FILE NO. : MD-68047
DATE : November 21, 2013
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DEAN STARK EXTRACTION

SAMPLE NO.	DEPTH ft	GRAIN DENSITY	POR %	PERM mD	SATURATIONS Sw	So	GAS UNITS	FLUORESCENCE %	LITHOLOGY
41	6517.0	2.78	5.0	0.036	90.4	0.0	0	0	DI yl mf Dol tn-crm sslyt sc slty intrbd abd sc A/I
42	6518.0	2.82	5.3	<.001	82.5	0.0	0	0	DI yl mf Dol tn-gy sslyt sc slty intrbd tr A/I
43	6530.5	2.65	18.6	0.711	87.1	0.0	0	0	DI mf Ss gy-tn-opaq vf-fgr sbang-sbrnd mcalc tr slty intrbd tr sml vug
44	6540.0	2.67	14.3	0.174	88.3	0.0	0	0	DI mf Ss gy-tn-opaq vf-fgr sbang-sbrnd scalc tr slty intrbd sc hal
45	6545.0	2.67	21.6	1.312	90.7	0.0	0	0	DI mf Ss gy-tn-opaq vf-fgr sbang-sbrnd scalc tr slty intrbd tr hal
46	6556.0	2.66	21.5	1.356	92.4	0.0	0	0	DI mf Ss gy-tn-opaq vf-fgr sbang-sbrnd mcalc tr slty intrbd sc hal
47	6570.0	2.67	16.4	0.598	90.5	0.0	0	0	DI mf Ss tn-gy-opaq vf-fgr sbang-sbrnd mcalc tr slty intrbd tr hal
48	6576.0	2.69	9.5	0.137	88.5	0.0	0	0	DI mf Ss gy-tn-opaq vf-fgr sbang-sbrnd scalc sc slty intrbd sc hal
49	6586.0	2.74	3.8	0.143	86.5	0.0	0	0	DI mf Ss gy-tn-opaq vf-fgr sbang-sbrnd scalc sc slty lam intrbd tr hal
50	6594.0	2.70	6.8	0.043	86.3	0.0	0	0	Ss gy-tn-opaq vf-fgr sbang-sbrnd scalc sc slty intrbd sc hal
51	6610.0	2.70	7.5	0.044	90.5	0.0	0	0	Ss gy-tn-opaq vf-fgr sbang-sbrnd scalc sc slty intrbd sc hal
52	6620.0	2.69	9.1	0.019	87.9	0.0	0	0	Ss gy-tn-opaq vf-fgr sbang-sbrnd scalc sc slty intrbd tr hal
53	6630.0	2.66	21.1	2.036	90.0	0.0	0	0	Ss gy-tn-opaq vf-fgr sbang-sbrnd scalc tr slty intrbd sc hal