



Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: BLU Unit #1-22 - Norstar Petroleum, Inc.
API: 15-111-20555-00-00
Location: NW-NW-SW-NE, Section 22-16S-11E
License Number: KCC # 31652
Spud Date: August 31, 2021
Surface Coordinates: 1322' FNL & 2373' FEL,
of Section
Bottom Hole Vertical Wellbore
Coordinates:
Ground Elevation (ft): 1341 Ft.
Logged Interval (ft): 2250 Ft. To: 3135 Ft. Total Depth (ft): RTD 3135 Ft. LTD 3135 Ft.
Formation: Arbuckle at Total Depth
Type of Drilling Fluid: Chemical

Region: Lyon County, Kansas
Drilling Completed: September 12, 2021
Results: D&A
Field: Wildcat

Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

Operator

Company: Norstar Petroleum, Inc.
Address: 88 INverness Circle East-Unit F104
Englewood, Colorado 800112+5514

Geologist

Name: M. Bradford Rine
Company: Consulting Geologist, Kansas Lic. #204, Wyo #189, AAPG Cert. #2647
Address: 100 South Main, Suite #320A
Wichita, Kansas 67202

Remarks

Based on sample observations, drill stem test results, and electric log evaluation, it was the decision of the Operator, to plug and abandon the "BLU Unit #1-22," on September 12, 2021.

Respectfully submitted,
M. Bradford Rine, geologist

Drilling Information

Rig: Lighthouse Drlg, Rig #1
Pump: Ideco Hydril 6.5 x 14
Drawworks: Skytop Brewster B550
Collars: 423' 2-1/4 x 6-1/4
Drillpipe: 4-1/2" 16.6# XH
Toolpusher: Charlie Coulter

Mud: AJ Services
Gas Detector: None
Drill Stem Tests: Trilobite (Spencer Staab)
Logs: Midwest Wireline (D. Schmidt)
Water: Farm Ponds on Location (AJ Services)
Company Representatives:
Office: Brady Pfeiffer
Field: NA

Daily Drilling Status

Date:	Operations/Depth/Comments
08-27-21	MIRT, RU @ 0'
08-28-21	Shut Down
08-29-21	Shut Down
08-30-21	Shut Down
08-31-21	Spud @ 0'
09-01-21	Prepare to Run Surface Casing @ 250'
09-02-21	Shut Down Due to Covid @ 250'
09-03-21	Shut Down Due to Covid @ 250'
09-04-21	Shut Down Due to Covid @ 250'
09-05-21	Shut Down Due to Covid @ 250'
09-06-21	Shut Down Due to Covid @ 250'
09-07-21	Prepare to Drill Out @ 250'
09-08-21	Drilling @ 1618'
09-09-21	Trip in Hole with New Bit @ 2562'
09-10-21	Drilling @ 2917'
09-11-21	Drilling @ 3051'
09-12-21	Logging @ 3135' RTD Plug in PM.

	Results: D&A			(Well A) Oil	(Well B) D&A				
	Norstar Petroleum, Inc.			J.O. Farmer, Inc.	Dunne-Gardner				
	BLU Unit #1-22			Prellwitz #1	Lowder #1				
	1322'FNL & 2373'FEL			NE-NE-SE	SW-SE-NW				
	Sec. 22-16S-11E			Sec. 16-16S-11E	Sec. 22-16S-11E				
	1353 KB		1397 KB	1335 KB	Well A	Well B			
Formations	Sample	E-Log	Datum	E-Log	Datum	E-Log	Datum	Comparison(s)	
Lansing	NC	1297	56	1342	55	1294	41	1	15
Kansas City	NC	1453	-100	1505	-108	1438	-103	8	3
Swope	NC	1653	-300	1710	-313	1623	-288	13	-12
Pleasanton	NC	1674	-321	1724	-327	1663	-328	6	7
Mississippian	2312	2310	-957	2375	-978	2315	-980	21	23
Kinderhook Sh.	2723	2721	-1368	2759	-1362	2717	-1382	-6	14
Hunton	2868	2868	-1515	2902	-1505	2861	-1526	-10	11
Viola	2944	2950	-1597	2980	-1583	2951	-1616	-14	19
Simpson Dol.	3032	3033	-1680	3060	-1663	3032	-1697	-17	17
Simpson Sd.	3052	3050	-1697	3076	-1679	3045	-1710	-18	13
Arbuckle	3096	3095	-1742	NP	NA	NP?	NA	NA	NA
Pre-Cambrian	NR	NR	NA	3106	-1709	NC	NA	NA	NA
Total Depth	3135	3135	-1782	3115	-1718	3051	-1716	-64	-66

Casing Record, Bit Record, Deviation Surveys

CASING:

Conductor: None

Surface: Ran 230' 8-5/8" 23# casing. (Elite) Cement with 140 sx Common, 3%CC, 2% gel, 1/4# flocele. Plug down at 8:28 PM, on August 31, 2021. Cement did circulate.

Production: P&A (Elite Cementing) Plug as follows: 15 sx at 3130', 15 sx at 2860', 15 sx at 1570', 30 sx at 270', 25 sx from 60' to surface, 15 sx in rathole and 10 sx in mousehole. Plug down at 12:30 PM on 9/12/2021. Dump and clean tanks. Rig released at 1 PM on 9/12/2021

BITS:

No.	Size	Make	Model	Depth In	Depth Out	Hours
1	12-1/4			0	250	1.00
2	7-7/8	Smith	616D6 rb	250	2562	25.75
3	7-7/8	JZ	KO1079	2562	3135	20.40

DEVIATION SURVEYS:

Deviation:	Depth:	Deviation:	Depth:
0.75*	250'	1.00*	2562'
0.25*	776'	1.50*	3044'
0.75*	1273'	1.00*	3135'
0.75*	1773'		

PIPE STRAPS:

Difference:	Depth:
+0.01'	2562'
-0.70'	3135'

MUD UP:

Displ & Mud Up @ 2242'

DST #1: 3035-3044 (Simpson)

Times: 05-30-30-30

Initial Open: Wk Blow, built to 1/2" i.b.

Final Open: No Blow

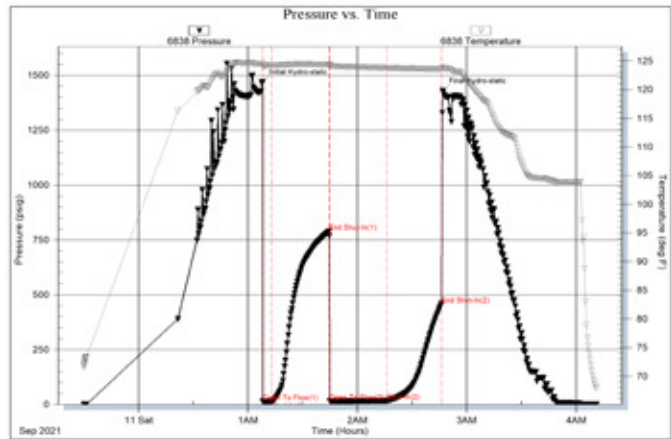
Rec: 10' Oil Specked Mud (flakey dead oil)

IHP: 1469 FHP: 1428

IFP: 14-14 FFP: 16-17

ISIP: 787 FSIP: 458

BHT: 123°F



DST #2: 3045-3061 (Simpson)

Times: 05-30-30-30

Initial Open: Wk Blow, built to 1/4" i.b.

Final Open: No Blow

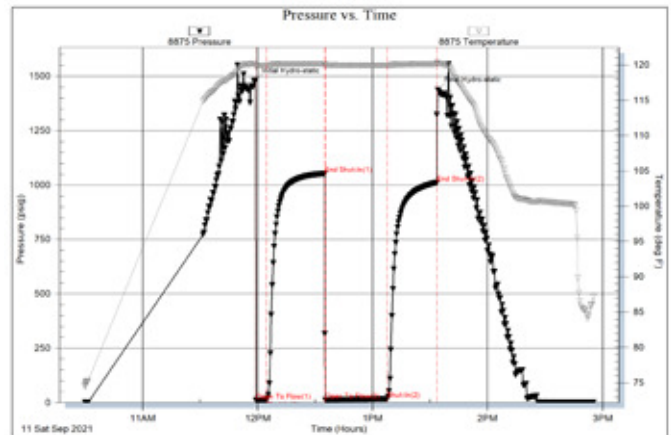
Rec: 10' Oil Specked Mud

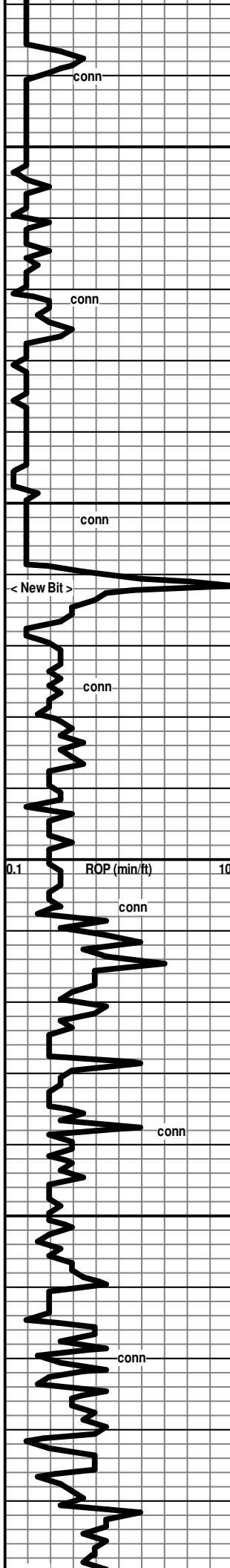
IHP: 1479 FHP: 1436

IFP: 10-12 FFP: 13-17

ISIP: 1052 FSIP: 1011

BHT: 120°F





2500

2550

2600

2650

2700

85% Shales, pl grn-grn, gy-dk gy-blk; 15% Ls & Dol Ls & Dol, cr-tan, vfn-fn xln, pr-fr-gd xln por, foss in pt, incr in fresh chert, subopaq-opaq

85% Shales, pl grn-grn, gy-dk gy-blk; 15% Ls & Dol Ls & Dol, cr-tan, vfn-fn xln, pr-fr-gd xln por, foss in pt, incr in fresh chert, subopaq-opaq, This interval could be dolom & limey chert!

2690' spl cleaning up!: 60% Ls & Dol & chert, chert is fresh, wh-cr, subtransl-subop-opaq; 40% shales

70% Ls & Dol & chert, chert is fresh, wh-cr, subtransl-subop-opaq; 30% shales

75% Ls/Dol Ls/Dol, cr-tan, vfn-fn xln, dns to pr vis xln por, abund chert: fresh to silty text, wh-pl gy. subtransl-opaq; 25% shales

60% Limey Dol/Dol Ls, cr-tan, vfn-fn xln, dns to pr vis xln por, abund chert: fresh, wh-pl gy. subtransl-opaq; 40% shales with scatt embedded pyr specks

25% Limey Dol/Dol Ls, cr-tan, vfn-fn xln, dns to pr-fr vis xln por, abund chert: fresh, wh-pl gy. subtransl-opaq; 75% shales, pl gy-gy-grnish, silty in pt, with scatt embedded pyr specks

60% Ls cr-tan. fn xlp. chalky to subchalky in pt. dns in pt. sli foss

* Bit Trip @ 2562 Ft.

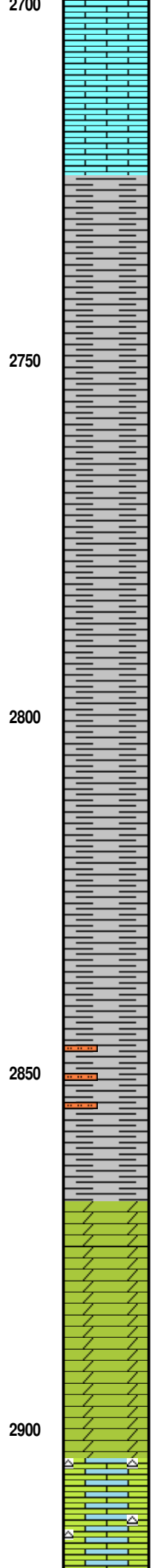
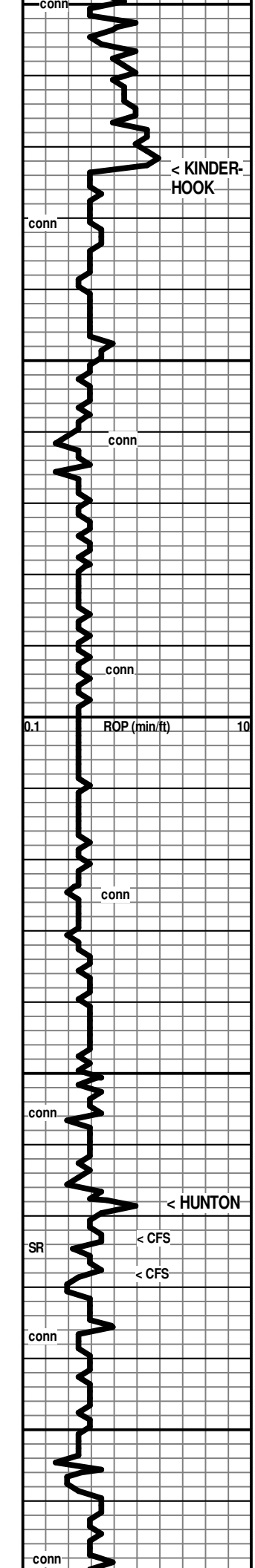
7:00 AM, September 09, 2021

* Pipe Strap @ 2562 Ft.:
Strap: 2583.08
Board: 2583.07
Difference: 0.01'

* Down for Repairs: Generator!

Mud Check, Drlg @ 2672':

Vis	Wt	WL	PV	YP
42	8.9	11.6	7	4
Chl	Hd	pH	LCM	Solids
500	72	10.5	0	4.5



in pt; 40% shales

50% Ls cr-tan, dns, sdy in pt, subchalky in pt; Sh gy-dk gy-blk

← 2723 (-1370)

Shale pl gy-pl grnish gy with some brwonish pcs, soft to subsoft, abund pcs rounded, subsilty in pt

Shale pl gy-pl grnish gy with some brwonish pcs, soft to subsoft, abund pcs rounded, some bladed pcs, subsilty in pt

Shale pl gy-pl grnish gy with some brwonish pcs, soft to subsoft, abund pcs rounded, some bladed pcs, subsilty in pt

Shale pl gy-pl grnish-gy with some brwonish pcs, soft to subsoft, abund pcs rounded, some bladed pcs, subsilty in pt

* Begin 10' Samples!

Shale pl gy-pl grnish-gy with some brwonish pcs, soft to subsoft, abund pcs rounded, some bladed pcs, subsilty in pt

Shale pl gy-pl grnish-gy with some brwonish pcs, soft to subsoft, abund pcs rounded, some bladed pcs, subsilty in pt, some siltstone

Shale pl gy-pl grnish-gy with some brwonish pcs, soft to subsoft, abund pcs rounded, some bladed pcs, subsilty in pt

← 2868 (-1515)

Dol wh-pl gy, fn-md xln, sucrosic-subrhombic text, some rhombic, pr-fr xln por, pr-fr-gd crush

Show Descr. ———>

Dol wh-pl gy, fn-md xln, sucrosic-subrhombic text, some rhombic, pr-fr xln por, pr-fr-gd crush

Show Descr. ———>

Dol wh-pl gy, fn-md xln, sucrosic-subrhombic text, some rhombic, pr-fr xln por, pr-fr-gd crush

Show Descr. ———>

Dol wh-pl gy, fn-md xln, sucrosic-subrhombic text, some rhombic, pr-fr xln por, pr-fr-gd crush, barren

Dol & Limey Dol, cr-tan, fn xln, silty-subsucr text, pr-frxln por, scatt vugs, abund chert: fresh, wh, opa-q-subop, foss in pt

* Mixing and Adding Mud to yield as per Operator spec's!

* Mixing and adding Mud!

Mud Check, Drlg @ 2872':

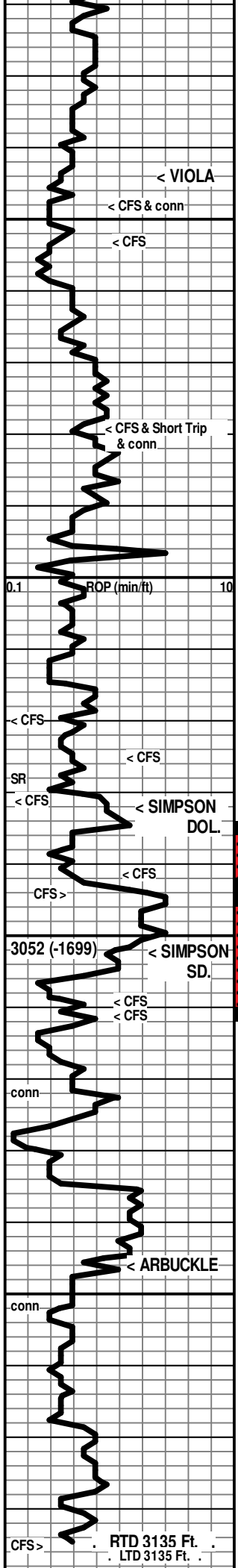
Vis	Wt	WL	PV	YP
54	9.0	8.2	13	14
Chl	Hd	pH	LCM	Solids
300	52	10.0	5	5.2

[< 2873' CFS: Mod+ Odor, Sli sour smell, No Fluor, abund spotty-stringy black tarry & Asphaltic Oil/Stn, NSFO, some vis barren pores]

[< 2878' CFS: Wk Odor, No Fluor, abund spotty-stringy black tarry & Asphaltic Oil/Stn, NSFO, some vis barren pores]

[< 2890' Spl: V Wk Odor, No Fluor, much fewer pcs with Shows of tarry to stringy black Oil/Stn, NSFO, mostly barren]

7:00 AM, September 10, 2021



2950
2950
3000
3000
3050
3050
3100
3100

Dol & Limey Dol, cr-tan, fn xln, silty-subsucr text, pr-frxln por, scatt vugs, abund chert: fresh, wh, opa-q-subop, foss in pt

Dol cr, fn xln, sucrosic text, pr-fr xln por, scatt vugs, some fresh foss chert, wh, opa-q

Sh gy (trace)

← 2944 (-1591)

Dol cr-gy, fn xln, fr-gd xln por, sucrosic-subrhombic, scatt vugs

???

Dol, cr-tan-brn-gy, fn xln, subsucrosic-sucr., pr-fr-gd xln por with scatt vugs

Dol, cr-tan-brn-gy, fn xln, subsucrosic-sucr., sdy in pt, pr-fr xln por, chert: fresh, opa-q,cr-tan, foss in pt

Dol, cr-tan-brn, fn xln, subsucrosic-sucr., silty-sdy in pt, pr-fr xln por, some chalky/limey cement, chert: fresh, opa-q,cr-tan, foss in pt

Dol, cr-tan-brn, fn xln, subsucrosic-sucr., silty-sdy in pt, pr-fr xln por, some chalky/limey cement, chert: fresh, opa-q,cr-tan, foss in pt

Dol, cr-tan, fn xln, subsucrosic-sucr. some subrh., pr-fr xln por,

* moderate am't of "blades" of dk gy-blk shale in circ spl!

← 3020 (-1667)

Dol tan-brn, fn xln, pr-fr vis xln por, some dns, subsucr-sucr.

Dol tan-brn, fn xln, pr-fr vis xln por, some dns, subsucr-sucr.

Sh pl grnsh gy-pl grn, silty in pt

← 3032 (-1679)

Sd tan-brn, vfn-fn grn, gd sort, subrd-subanglr, pr-fr friable, some gd fri, calc in pt, mix of sharp-rd clusters, mostly pr-fr vis intergrnlr por, some gd por, Some Dol/Dol sd in 3042-3044' spl, brn, pr-fr xln por with scatt pp pores, pr-fr crush, suc.

Show Descr. →

3050' spl: Sd & Quartz, cr-blk, fn grn sd, well sort, subanglr-subrd, pr-fr fri, black with shale and dead oil, some black sharp qtz, opa-q, some dk shale

3055' & 3059' spl: Sd, clean to dirty, wh-cr-gy, mixed fn grn-md, fr-gd sort, mostly subrd'd, sharp to subrd to rd'd clusters, pr-fr-gd fri., Sd reservoir improves with depth

3061' CFS: Sd, mostly "clean", wh-cr-gy, mixed fn grn-md, fr-gd sort, mostly subrd'd, mostly subrd to rd'd clusters, pr-fr-gd fri., Sd reservoir improves with depth

Show Descr. →

3070' & 3080' spl: Sd, mostly "clean" to "dirty," wh-cr-gy, mixed fn grn-md, fr-gd sort, mostly subrd'd, mostly subrd to rd'd clusters with some sharp clusters, pr-fr-gd fri.,

3090' spl: 90% clean white sand, subrd to rd clusters, fn-md grn, fr-gd sort, fr-gd fri, fr-gd intergrnlr por, some dk-blk pyritic shale

Show desc. →

3100' spl: Mostly Sds, sharp to rd'd clusters, vfn-fn-md grn, pr-fr por, pr-fr fri, abund pyritic sd, abund sdy pyrite, scatt glauc specks, some subvitreous qtz, some gy dk shale, [Tr dead flakey specks]

Arb. ← 3096 (-1743)

3110' spl: Mostly Dol, cr-tan, vfn-fn xln, subsucr-sucrosic, mostly pr vis por, some fr xln por, some dns, abund chert: fresh, wh-cr, trans-opaq, foss in pt, some shale and sand as above [NS]

Mostly Dol, cr-tan, vfn-fn xln, subsucr-sucrosic, mostly pr vis por, Rr fr xln por, some dns, abund chert: fresh, wh-cr, trans-opaq, ool in pt; 20% Shale pl gy-pl grn

*[<2960' spl: tray had a few pcs of Dol (looked just like the T/Hunton pcs above) with spots of Tar/Asphalt, mostly barren pores] Likely from not cleaning re-used spl cups!

DST #1: 3035-3044 (Simpson)
Times: 05-30-30-30
Initial Open: Wk Blow, built to 1/2" i.b.
Final Open: No Blow
Rec: 10' Oil Specked Mud (flakey dead oil)
IHP: 1469 FHP: 1428
IFP: 14-14 FFP: 16-17
ISIP: 787 FSIP: 458
BHT: 123°F

* Short Trip @ 2979 Ft. to prepare for DST's below. Pulled 10 Stands!

DST #2: 3045-3061 (Simpson)
Times: 05-30-30-30
Initial Open: Wk Blow, built to 1/4" i.b.
Final Open: No Blow
Rec: 10' Oil Specked Mud
IHP: 1479 FHP: 1436
IFP: 10-12 FFP: 13-17
ISIP: 1052 FSIP: 1011
BHT: 120°F

[3041' CFS: Stg Odor, No fluor, Mod-Gd shows of Dk Brn Oil (some bleeding, some on crush): mix of FO, NVL oil, thick hvy tarry oil, deadish oil, abund dk stnl
[3044' CFS: Stg Odor, No fluor, Mod-Gd shows of Dk Brn Oil (some bleeding, some on crush): mix of FO, NVL oil, thick hvy tarry oil, deadish oil, abund dk stn. *In mix of Dol, Dol Sd, Sdy Dol, Sd]

7:00 AM, September 11, 2021
[3050' spl: Mild Odor, some black sd, NSFO, trace of dead oil, No bleeding, or tar]
[3059' Spl: Mod Odor, No fluor, abund pcs with blk asphaltic matrix, with scatt trace to sli shows of dk hvy FO & NVL oil, abund barren pcs from 3050 to 3059.]
[3061' Spl: Mild Odor, No fluor, Mod am't pcs with blk asphaltic matrix, with scatt shows of dk hvy FO & NVL oil, incr'd barren pcs from 3059-3061.

[3070' Spl: Mild Odor, No fluor, Mod am't pcs with blk asphaltic to DO matrix, incr'ing barren pcs.

[3080' spl: Fnt Odor, Mod am't pcs with blk asphaltic to DO matrix, incr'ing barren pcs.]
[3090' spl: No Oder, few pcs with blk asphaltic to flakey to DO matrix, 90% barren pcs.]

Mud Check, Drlg @ 3053':

Vis	Wt	WL	PV	YP
60	9.0	6.8	27	34
Chl	Hd	pH	LCM	Solids
600	68	10.0	3	5.2

Mud Check, Drlg @ 3121':

Vis	Wt	WL	PV	YP
47	9.1	8.5	18	7
Chl	Hd	pH	LCM	Solids
550	48	10.0	3	6.0

Total Depth 3135 ft., Reached at 10:00 PM, September 11, 2021!

