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GEOLOGIST'S REPORT
 DRILLING TIME AND SAMPLE LOG

OPERATOR Cobalt Energy, LLC
 LEASE Davis-Heskett Unit Well No. 4 (L-3)
 FIELD _____
 LOCATION 335' FSL + 316' FEL
 SEC. 31 TWP. 7S RGE. 25 W
 COUNTY Graham STATE Kansas

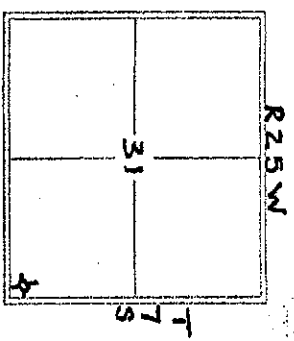
CONTRACTOR Murfin Drilling Co. Rig-16
 COMM: 10-24-2014 COMP. 10-30-2014
 RTD 4000' LOG TO 4000'
 SAMPLES SAVED FROM _____ TO _____ RTD
 DRILLING TIME KEPT FROM _____ TO _____ RTD
 SAMPLES EXAMINED FROM _____ TO _____ RTD
 GEOLOGICAL SUPERVISION FROM 3625' TO _____ RTD
 MUD UP 3090' TYPE MUD chemical

FORMATION	TOP	LOG	DATUM	TOP	SAMPLE	DATUM	STRUCT.
Anhydrite	2158'	F336	2156'	F338	-6		
Base Anhydrite	2190'	F304	2187'	F307	-7		
Akron sh	3693'	-1199	3696'	-1202	-5		
Lansing	3727'	-1232	3730'	-1236	-1		
Huncie Creek	3845'	-1351	3847'	-1353	-2		
Shark Shale	3904'	-1410	3907'	-1413	-		
Base Kans. Glt	3949'	-1455	3948'	-1454	-4		

ELEVATION
 KB 2494'
 DF _____
 CI 2489'
 Measurements Are All From KB

CASING RECORD
 SURFACE 8 5/8" @ 217'
16.5 SX
 PRODUCTION none

ELECTRICAL SURVEYS
 Pioneer Wireline
 Dual Induction
 Sonic Log
 Micro-log
 R25 W
 T
 S



REFERENCE WELL FOR STRUCTURAL COMPARISON
Sec. 31-75-25W, 2494' KB Chief drg. co. Davis No. 1, 1/2 NE, Sec.

DATE	DEPTH	NO	SIZE	MARK	TYPE	DEPTH OUT	FEET	REMARKS
10-24-2014	meter	A	Red	pc	12 1/4	218	218	1 3/4
10-25-2014	665' set surf	1	WTC	OR-WTC	7 7/8	4000	3182	N/A
10-26-2014	2600' drg							
10-27-2014	3500' dst-1	1						
10-28-2014	3820' dst-2	2						
10-29-2014	3908' dst-3	3						
10-30-2014	4000' Logging	4						

FORMATION	DEPTH	DESCRIPTION OF CORE	LOG NUMBER
Lansing "C"	3160-3765	limestone, cream to white, fine gr. highly OR, No odor. No free oil & No odor	dst-1
Lansing "F"	3810-3915	lime stone, cream, spotted, 3 pieces per tray, 1 qt w/ 1/8" oil odor	dst-1
Lansing "H"	3860-3863	lime stone, cream, light tan, in tray as per	dst-2
Lansing "J"	3885-3900	limestone, cream, spotted, 3 pieces per tray, 1 qt w/ 1/8" oil odor	dst-3
Lansing "K"	3914-3920	limestone, cream, spotted, 3 pieces per tray, 1 qt w/ 1/8" oil odor	dst-4

No.	Interval	FT
1	3741-3820	40'
2	3840-3880	23'
3	3873-3908	24'
4	3904-3955	25'

Unit A, 1-31
 10-30-2014

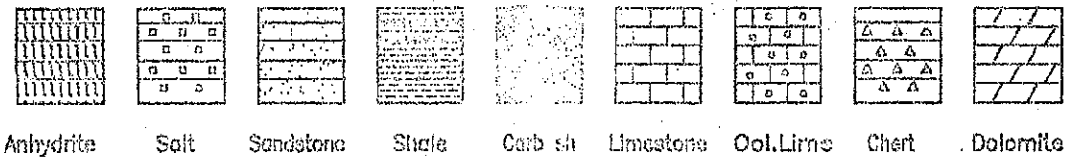
DRILL STEM TESTS

Interval	FP/Time	ISP/Time	PP/Time	FP/Time	SP-GR	REMARKS
3741-3820	40-57 30"	1213 60"	10-88 60"	1194 90"	1867 1838	140' Muddy water N.S.
3840-3880	23-30 30"	1196 60"	35-38 60"	1169 90"	1922 1898	50' V.S.O.C.M 5% OIL
3873-3908	24-43 30"	1221 60"	46-65 60"	1187 90"	1945 1896	15' GIP 15' G.O.I 90% oil 30' S.O.C.M 10% oil 60' V.S.O.C.M 2% oil
3904-3955	25-25 30"	208 60"	28-28 30"	48 30"	1954 1915	5' mud N.S.

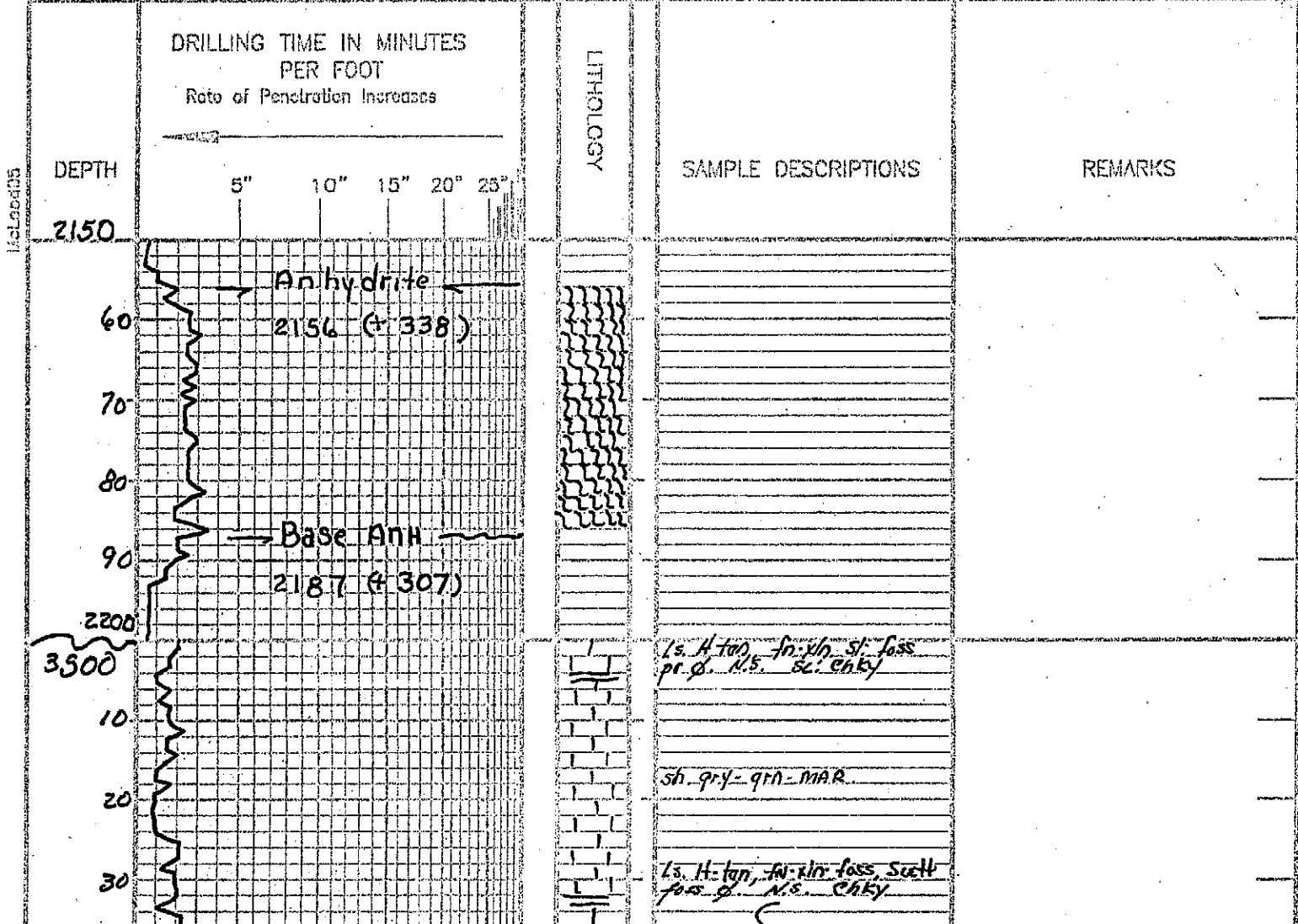
It is noted that the results of tests the Davis-Heske #1 at A. 1-31 was declared dry and abandoned on 30-2-014

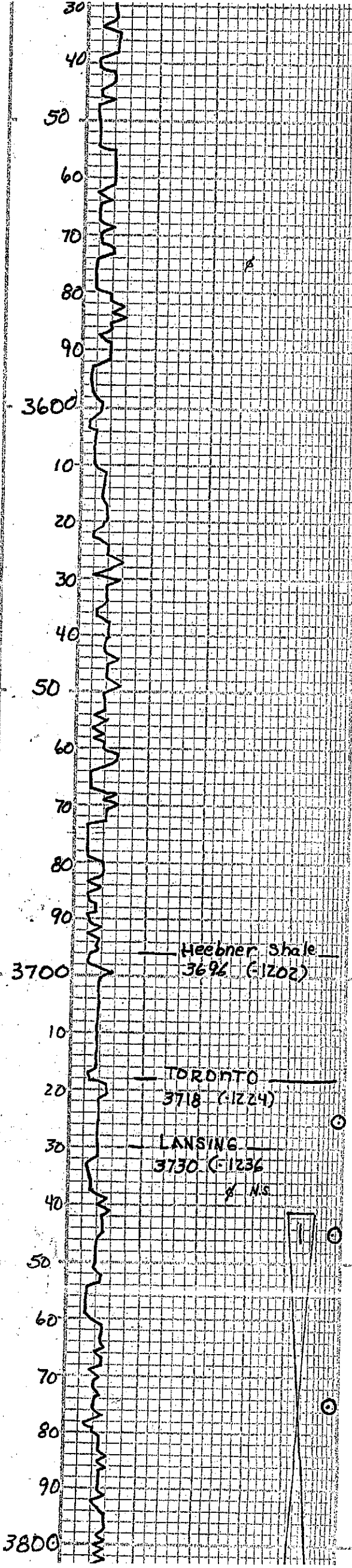
Respectfully
Jung S. M. Lee

LEGEND



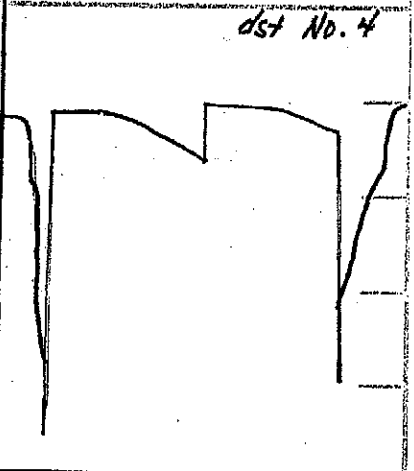
SCALE " = 100'



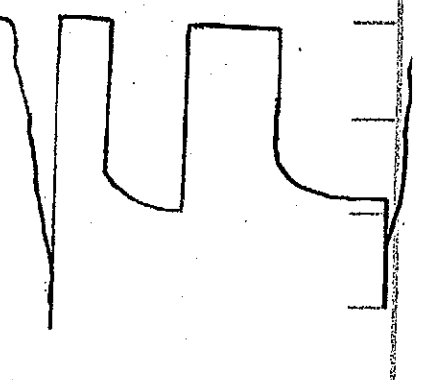


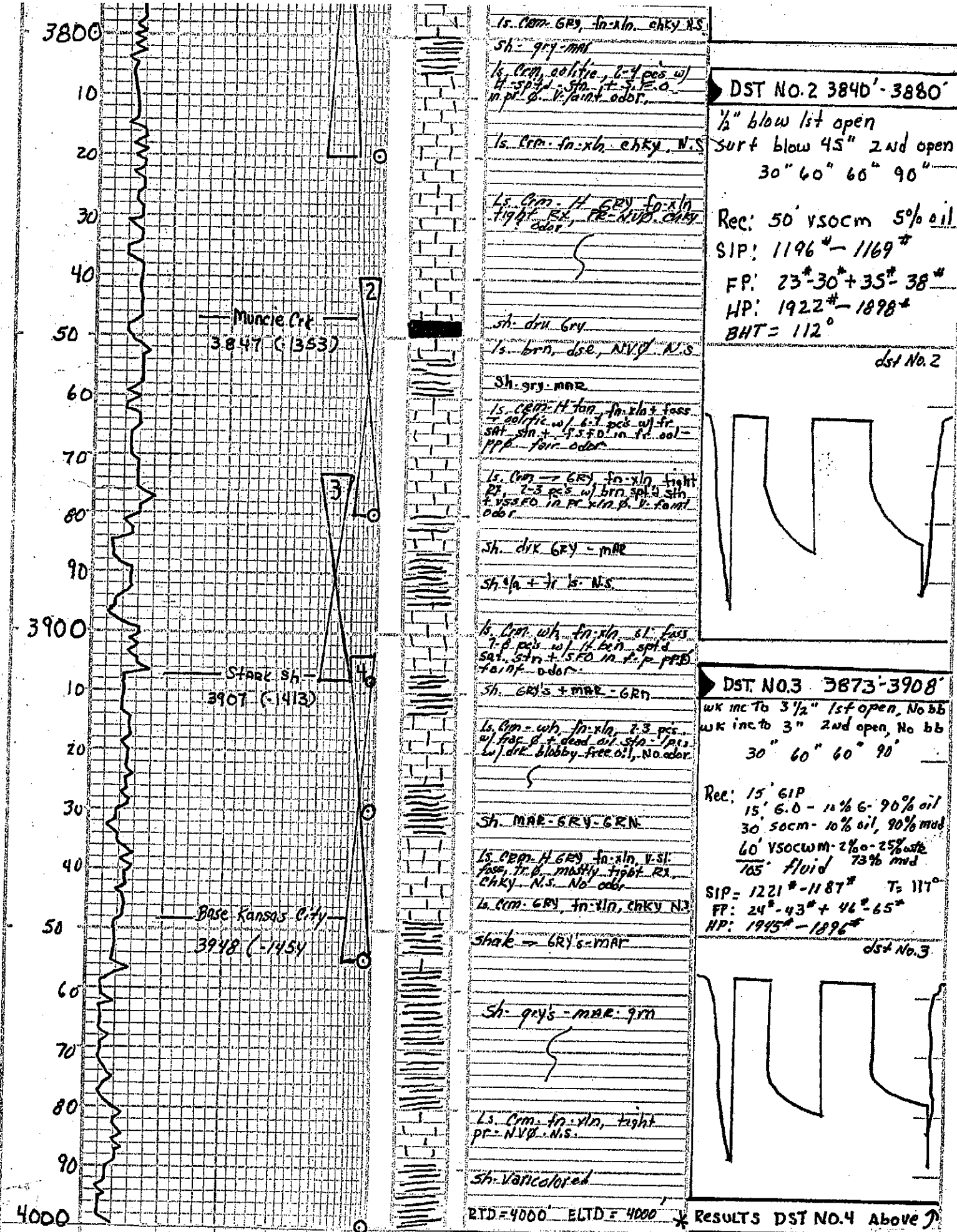
15. Lt. tan. fr. xln. foss w/ fair foss. chky. N.S.
 shly
 15. Lt. tan. fr. xln. foss w/ fair foss. chky. N.S.
 15. Lt. tan. - crm. fr. xln. foss. + chky. N.S.
 sh. blk carb.
 shales, varicolored
 15. Crm. fr. xln. foss w/ fr. foss. chky. N.S.
 15. Crm. wh. - gry. fr. xln. foss w/ fr. chky. N.S.
 sh. blk-mar.
 15. Crm. + brn. fr. xln. sl. chky. foss. N.S.
 15. Crm. - GRY. fr. xln. foss fr. chky. N.S.
 15. Crm. - GRY. fr. xln. + foss fr. foss. chky. N.S.
 sh. blk carb.
 15. tan. fr. xln. sl. foss tight. RX, NVP. N.S.
 sh. gry's - mar.
 15. Crm. fr. xln. foss w/ fr. fr. foss. N.S. / chky.
 sh. blk - gry - grn.
 15. Crm. wh. - ool. w/ fr. med. ool. N.S. - v. chky. No odor.
 15. Crm. xln. sl. ool. w/ pr. ool. N.S. No odor, chky.
 15. Crm. fr. xln. sl. foss N.S. chky.
 sh. varicolored.
 15. Crm. wh. fr. xln. tight RX, NVP, N.S. chky. No odor.
 sh. gry's - mar.
 15. wh. CRM + GRY. fr. xln. tight RX, NVP. N.S. chky.
 shly. gry - red - mar.
 15. Crm. GRY. fr. xln. chky. N.S.
 sh. gry - mar.

DST No. 4 3904'-3955'
 wk blow 3/4" 1st open
 No blow 2nd open
 30" 60" 30" 30"
 Rec: 5' mud
 SIP: 208* - 48*
 FP: 25* - 25* + 28* - 28*
 HP: 1954* - 1915*



DST No. 1 3741'-3820'
 wk - 2 1/2" blow 1st open
 wk - 2" blow 1st 2nd open
 30" 60" 60" 90"
 Rec: 140' mud, n.s.
 SIP: 1213* - 1194*
 FP: 40* - 57* + 60* - 88*
 HP: 1869* - 1838*
 BHT = 114°





DEPTH	DRILLING TIME Minutes/Foot	LITHOLOGY	SAMPLE DESCRIPTIONS	REMARKS
3800			ls. con. GR, fn. xln. chky. N.S.	
3840			sh. gry-mar	DST NO. 2 3840'-3880'
3847			ls. con. fn. xln. chky. N.S.	1/2" blow 1st open surf blow 45" 2nd open 30" 60" 60" 90"
3853			sh. gry-mar	Rec: 50' vsocm 5% oil SIP: 1196# - 1169# FP: 23#-30# + 35#-38# HP: 1922# - 1898# BHT = 112°
3873			ls. con. H. GR, fn. xln. tight pr. 2-3 pcs w/ brn spl. 4 sh. + 5.5 FO in pr. 1.00 - fair odor.	DST NO. 3 3873'-3908'
3880			sh. dk. GR - MAR	wk mc to 3 1/2" 1st open, No bb wk inc to 3" 2nd open, No bb 30" 60" 60" 90"
3907			sh. gry + mar - GRN	Rec: 15' 6IP 15' 6.0 - 11% 6-90% oil 30' socm - 10% oil, 90% mud 60' vsocwm - 2% 0-25% water 105' fluid 73% mud
3913			ls. con. wh. fn. xln. 2-3 pcs w/ frag. & dead oil. sh. 1 pr. w/ dk. blobby-free oil, No odor.	SIP: 1221# - 1187# T: 117° FP: 24#-43# + 46#-65# HP: 1945# - 1896#
3948			sh. MAR - GR - GRN	ds# No. 3
3954			ls. con. H. GR, fn. xln. v. sl. fast. tr. 0. mostly tight pr. chky. N.S. No odor.	
4000			sh. varicolored	

COMPANY Cobalt Energy LLC
 LEASE Davis-Heskett Unit "A" 1-31
 LOCATION 335' E 1/4, 316' E 1/4 SEC 31, TWP 7S, RNG 25 W
 COUNTY Graham STATE Kansas
 ELEVATION: 2494' K.B.
 RTD = 4000' ELTD = 4000' * RESULTS DST NO. 4 Above