

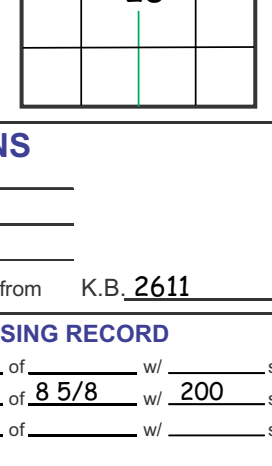
# GEOLOGICAL REPORT FINAL

## Larry A. Nicholson

NAD 83  
38.8098567  
-100.5451119

**COMPANY & WELL: MAREXCO, Inc. Lundgren #32-28**  
 LOCATION 2004' FNL 1603 FEL E2 SW NE  
 SEC 28 TWP 14S RGE 29W  
 COUNTY Gove STATE KS

COMPANY	<b>MAREXCO, Inc.</b>		FIELD	<b>Lundgren #32-28</b>	
API #	<b>15-063-22343</b>		WELL #	<b>28</b>	
LEASE	<b>Lundgren</b>				
LOCATION	<b>E2 SW NE</b>				
SURVEY	<b>2004' FNL 1603 FEL</b>				
SECTION	<b>28</b>	TWP	<b>14S</b>	RGE	<b>29W</b>
COUNTY	<b>Gove</b>		STATE	<b>Kans</b>	
CONTRACTOR	<b>White Knight Drilling</b>		Rig #	<b>#1</b>	
SPUD	<b>12-30-2018 4:15pm</b>		COIMP.	<b>ELEVATIONS</b>	
RTD	<b>4:35:10:57pm 01-09-19</b>		LTD	<b>4:35:00</b>	
MUD UP AT	<b>3400</b>		K.B.	<b>2611</b>	
MUD TYPE	<b>Chemical, KDT Ken Rupp</b>		D.F.	<b>2606</b>	
SAMPLES SAVED	FROM <b>3500</b> TO <b>RTD</b>		All measurements from <b>K.B. 2611</b>		
DRILLING TIME	FROM <b>3400</b> TO <b>RTD</b>		CASING RECORD		
SAMPLES EXAMINED	FROM <b>3500</b> TO <b>RTD</b>		Conductor	of _____ of _____ w/ _____ in _____	
GEOLOGICAL SUPERVISION	<b>LARRY A. NICHOLSON</b>		Surface	261 of 8/58 w/ 200	
WELL SITE GEOLOGIST	<b>LARRY A. NICHOLSON</b>		Production	of _____ of _____ w/ _____ in _____	



FORMATION	SAMPLE TOPS	SURFACE DATUM	ELEC LOG TOPS	SURFACE DATUM	REFERENCE WELL		
Anhydrite			2026	-585	2024	+589	-4
B/Anhydrite			2037	-594	2058	+655	-7
Hessberg Sh			3437	-1024	3446	+1033	-1
Lansing			3674	-1065	3684	-1071	+6
Stark Sh			3923	-1312	3924	-1311	-1
BKC			3996	-1385	3997	-1384	-1
Pownee			4100	-1489	4104	-1491	+2
Fort Scott Ls			4174	-1563	4174	-1561	-2
Cherokee Sh			4197	-1586	4198	-1585	-1
Johnson Zone			4236	-1625	4244	-1631	+6
Miss			4270	-1659	4270	-1657	-2
RTD			4350	-1739	4370		
LTD			4350	-1739	4367		

REFERENCE WELLS  
 A: Chief Drlg Lundgren #1 SW SW NE 28-T14S-R29W KB 2613.  
 B:

LAN 792, Modified 5/05, 11/11, 4/12, 4/18 1inch=25.4mm 8.5 x 9.7 216 mm x 2480 mm

**DRILLSTEM TEST SUMMARY:**

Dst #1 3695-3725 (LKC B) 15 30 15 90 IF-71-167 FF-186-777 SI-872-470 Rec Total 650' Fluid 850' GIP 230' GO (30G 70D) 300' GMCO (30G 650 5M) 120' GMCO (20G 450 15W 20M) IF-BOB 90 sec 18' return FF-BOB 90 sec 45'	REMARKS & RECOMMENDATIONS:
Dst #2 3724-3742 (LKC D) 15 30 15 90 IF-49-180 FF-100-209 SI-848-859 Rec Total 600' Fluid 90' GIP 50' O (100D) 100' GMCO (100 85W 5M) 450' SMCW O spits (89W 2M) IF-BOB 2M 39' 2TR, FF-BOB 2M 34' 4TR	
Dst #3 3922-3962 (LKC K) 30 45 45 60 IF-29-38 FF-141-49 SI-717-702 Rec 3' O on surf, 350' WCM O spits (50W 50M) IF-BOB 18' built 15' NR FF 3 1/2' slow, NR	<p><b>Based on DST results in the LKC B &amp; D and probable CK &amp; Johnson, csq was run.</b></p> <p><b>LTD and RTD are on same depth.</b></p> <p><b>Samples in general were fine and shaley.</b></p> <p><b>Due to drilling under compression.</b></p> <p><b>There was a total of 271 ft of collars (4 stands).</b></p>
Dst #4 4097-4196 (Paw-Ft Scott) 30 30 45 30 IF-29-38 FF-104-179 SI-1010-973 Rec 3' O on surf, 350' WCM O spits (50W 50M) IF-BOB 18' built 15' NR FF BOB 25' built to 19' NR	
Dst #5 4190-4255 (CK-Johns) 15 30 30 60 IF-43-145 FF-149-270 SI-1046-1026 Rec 3' O on surf, 350' WCM O spits (50W 50M) IF-BOB 18' built 15' NR FF BOB 2.5' built 39' 3/4R FF-BOB 4.5' built 55' 4 1/2R	

### LEGEND

