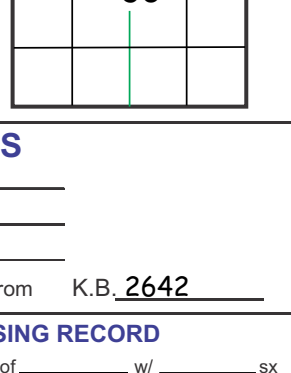


GEOLOGICAL REPORT FINAL

Larry A. Nicholson

NAD 83
99 85227150
100 4092500

COMPANY Suemour Exploration & Production, LLC		FIELD WELL #1-30	
API # 15-039-21264		LEASE COOK	
LOCATION SW NE SW NW		SURVEY 1794 FNL 693 FEL	
SECTION 30		TWP 02S	
COUNTY Decatur		STATE Ks	
CONTRACTOR Murfin Drilling Inc		Rig # 7	
SPUD 09-24-19 11:30 pm		COMP RTD	
RTD 4199 8:37am 10-02-19		LTD 4199	
MUD UP AT 2963		ELEVATIONS	
MUD TYPE Chemical Morgan Mud Dave Lines		K.B. 2642	
SAMPLES SAVED		D.F. 2637	
DRILLING TIME		G.L. 2637	
SAMPLES EXAMINED		All measurements from K.B. 2642	
GEOLOGICAL SUPERVISION		CASING RECORD	
WELL SITE GEOLOGIST		Surface 220 of 8 5/8 wf 175 sx	
LARRY A. NICHOLSON		Production of 0 wf 0 sx	



ELECTRICAL SURVEYS - Halliburton Dual, Den, Neu, Micro Sonic

FORMATION	SAMPLE TOPS	SURSEA DATUM	ELEC LOG TOPS	SURSEA DATUM	REFERENCE WELL
Anhydrite			2296	+345	
Heabner			3300	-332	
Lansing			3350	-842	
LANS B			3615	-873	
LANS C			3632	-900	
LANS J			3640	-998	
LANS I			3763	-1121	
Stark Sh			3773	-1131	
LANS K			3789	-1147	
BKC			3817	-1175	
Arb			4076	-1434	
RTD			4199	-1557	
LTD			4199	-1557	

REFERENCE WELLS
A: _____
B: _____

LAN 792, Modified 505, 11/11, 4/12, 4/18 1inch=25.4mm 8.5 x 9.5 216 mm x 2460 mm

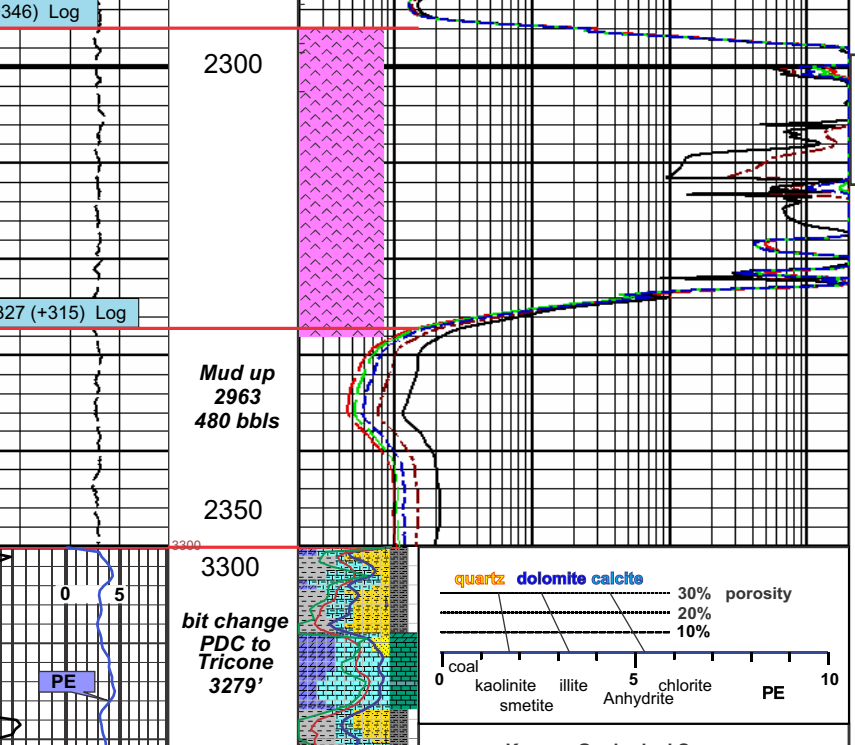
DRILLSTEM TEST SUMMARY :

Dat #1 3584-3643 (L-KC C) 15 45 45 60 IF-61-266 FF-257-362 SI-1184-1180
 Rec: Total Fluid 755 trc O in tool, 1327 MCW (71W 29M) 2507 SMCW (90W 10M)
 IF BOB 3 12mm, built 41", nr FF BOB 4min, built 100, nr
 FF BOB 5 min, built 51", nr
 FF BOB 6 min, built 100, nr
 FF BOB 7 min, built 100, nr
 FF BOB 8 min, built 100, nr
 FF BOB 9 min, built 100, nr
 FF BOB 10 min, built 100, nr
 FF BOB 11 min, built 100, nr
 FF BOB 12 min, built 100, nr
 FF BOB 13 min, built 100, nr
 FF BOB 14 min, built 100, nr
 FF BOB 15 min, built 100, nr
 FF BOB 16 min, built 100, nr
 FF BOB 17 min, built 100, nr
 FF BOB 18 min, built 100, nr
 FF BOB 19 min, built 100, nr
 FF BOB 20 min, built 100, nr
 FF BOB 21 min, built 100, nr
 FF BOB 22 min, built 100, nr
 FF BOB 23 min, built 100, nr
 FF BOB 24 min, built 100, nr
 FF BOB 25 min, built 100, nr
 FF BOB 26 min, built 100, nr
 FF BOB 27 min, built 100, nr
 FF BOB 28 min, built 100, nr
 FF BOB 29 min, built 100, nr
 FF BOB 30 min, built 100, nr
 FF BOB 31 min, built 100, nr
 FF BOB 32 min, built 100, nr
 FF BOB 33 min, built 100, nr
 FF BOB 34 min, built 100, nr
 FF BOB 35 min, built 100, nr
 FF BOB 36 min, built 100, nr
 FF BOB 37 min, built 100, nr
 FF BOB 38 min, built 100, nr
 FF BOB 39 min, built 100, nr
 FF BOB 40 min, built 100, nr
 FF BOB 41 min, built 100, nr
 FF BOB 42 min, built 100, nr
 FF BOB 43 min, built 100, nr
 FF BOB 44 min, built 100, nr
 FF BOB 45 min, built 100, nr
 FF BOB 46 min, built 100, nr
 FF BOB 47 min, built 100, nr
 FF BOB 48 min, built 100, nr
 FF BOB 49 min, built 100, nr
 FF BOB 50 min, built 100, nr
 FF BOB 51 min, built 100, nr
 FF BOB 52 min, built 100, nr
 FF BOB 53 min, built 100, nr
 FF BOB 54 min, built 100, nr
 FF BOB 55 min, built 100, nr
 FF BOB 56 min, built 100, nr
 FF BOB 57 min, built 100, nr
 FF BOB 58 min, built 100, nr
 FF BOB 59 min, built 100, nr
 FF BOB 60 min, built 100, nr
 FF BOB 61 min, built 100, nr
 FF BOB 62 min, built 100, nr
 FF BOB 63 min, built 100, nr
 FF BOB 64 min, built 100, nr
 FF BOB 65 min, built 100, nr
 FF BOB 66 min, built 100, nr
 FF BOB 67 min, built 100, nr
 FF BOB 68 min, built 100, nr
 FF BOB 69 min, built 100, nr
 FF BOB 70 min, built 100, nr
 FF BOB 71 min, built 100, nr
 FF BOB 72 min, built 100, nr
 FF BOB 73 min, built 100, nr
 FF BOB 74 min, built 100, nr
 FF BOB 75 min, built 100, nr
 FF BOB 76 min, built 100, nr
 FF BOB 77 min, built 100, nr
 FF BOB 78 min, built 100, nr
 FF BOB 79 min, built 100, nr
 FF BOB 80 min, built 100, nr
 FF BOB 81 min, built 100, nr
 FF BOB 82 min, built 100, nr
 FF BOB 83 min, built 100, nr
 FF BOB 84 min, built 100, nr
 FF BOB 85 min, built 100, nr
 FF BOB 86 min, built 100, nr
 FF BOB 87 min, built 100, nr
 FF BOB 88 min, built 100, nr
 FF BOB 89 min, built 100, nr
 FF BOB 90 min, built 100, nr
 FF BOB 91 min, built 100, nr
 FF BOB 92 min, built 100, nr
 FF BOB 93 min, built 100, nr
 FF BOB 94 min, built 100, nr
 FF BOB 95 min, built 100, nr
 FF BOB 96 min, built 100, nr
 FF BOB 97 min, built 100, nr
 FF BOB 98 min, built 100, nr
 FF BOB 99 min, built 100, nr
 FF BOB 100 min, built 100, nr

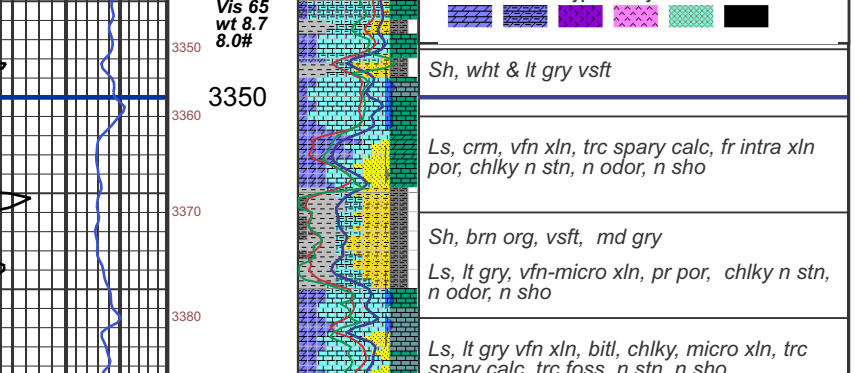
REMARKS & RECOMMENDATIONS:

Due to lack of weak shows, and dst results,
 the well was P&A
 * Note there was some problems in ROP correlation in the LKC due to stratigraphic changes, and reverse drilling in the limbs & shales.
 * Note the ROP Circ. Dats are 2 ft deeper than the Electric log. Moving the dsts up 2 feet to match the elec.
 * DST 1 & 2 did cover the 'C' zone based on the mud cake on the caliper.

LEGEND



Kansas Geological Survey Log Curve Cross Plot



DST (1) 3584-3643

DST (1) 3584-3643
 Top: LKC C
 15 45 45 60
 IF: BOB 3 1/2 min, 41.25"
 FF: BOB 4 min, 100.5"
 Total: 1145 Fluid
 715 MCW (78W 22M)
 430 SMCW (94W 6M)
 FP: 61-266 FFP: 257-562
 SIP: 1184 FSP: 1160
 HP: 1849 FHP: 1807
 Temp 112° F BHT
 Rw 241 @ 66.7'
 Chloride 31,000ppm

DST (2) 3623-3643

DST (2) 3623-3643
 LAN A-LKC C
 15 30 60
 IF: BOB 5 3/4 min, 30"
 IS: week surf blow back
 FF: BOB 5 3/4 min, 51"
 Total: 755 Fluid
 130' MCW (71W 29M)
 250' SMCW (90W 10M)
 375' VSMCW (97W 3M)
 SIP: 1193 FSP: 1191
 HP: 1899 FHP: 1835
 Temp 114° F BHT
 Rw 169 @ 83.3'
 Chloride 36,000ppm

DST (3) 3647-3659

DST (3) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (4) 3647-3659

DST (4) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (5) 3647-3659

DST (5) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (6) 3647-3659

DST (6) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (7) 3647-3659

DST (7) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (8) 3647-3659

DST (8) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (9) 3647-3659

DST (9) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (10) 3647-3659

DST (10) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (11) 3647-3659

DST (11) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (12) 3647-3659

DST (12) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (13) 3647-3659

DST (13) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (14) 3647-3659

DST (14) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (15) 3647-3659

DST (15) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (16) 3647-3659

DST (16) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (17) 3647-3659

DST (17) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (18) 3647-3659

DST (18) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (19) 3647-3659

DST (19) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (20) 3647-3659

DST (20) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (21) 3647-3659

DST (21) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (22) 3647-3659

DST (22) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (23) 3647-3659

DST (23) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (24) 3647-3659

DST (24) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (25) 3647-3659

DST (25) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (26) 3647-3659

DST (26) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (27) 3647-3659

DST (27) 3647-3659
 LKC D
 30 60 60
 IF: blow built to 314"
 IS: nr
 FF: surf blow built slightly
 FS: nr
 Total: 15' Fluid
 15' MCW (100' 7W 83M)
 FP: 15-21 FFP: 21-25
 SIP: 978 FSP: 973
 HP: 1841 FHP: 1814
 Temp 104° F BHT

DST (28) 3647-3659