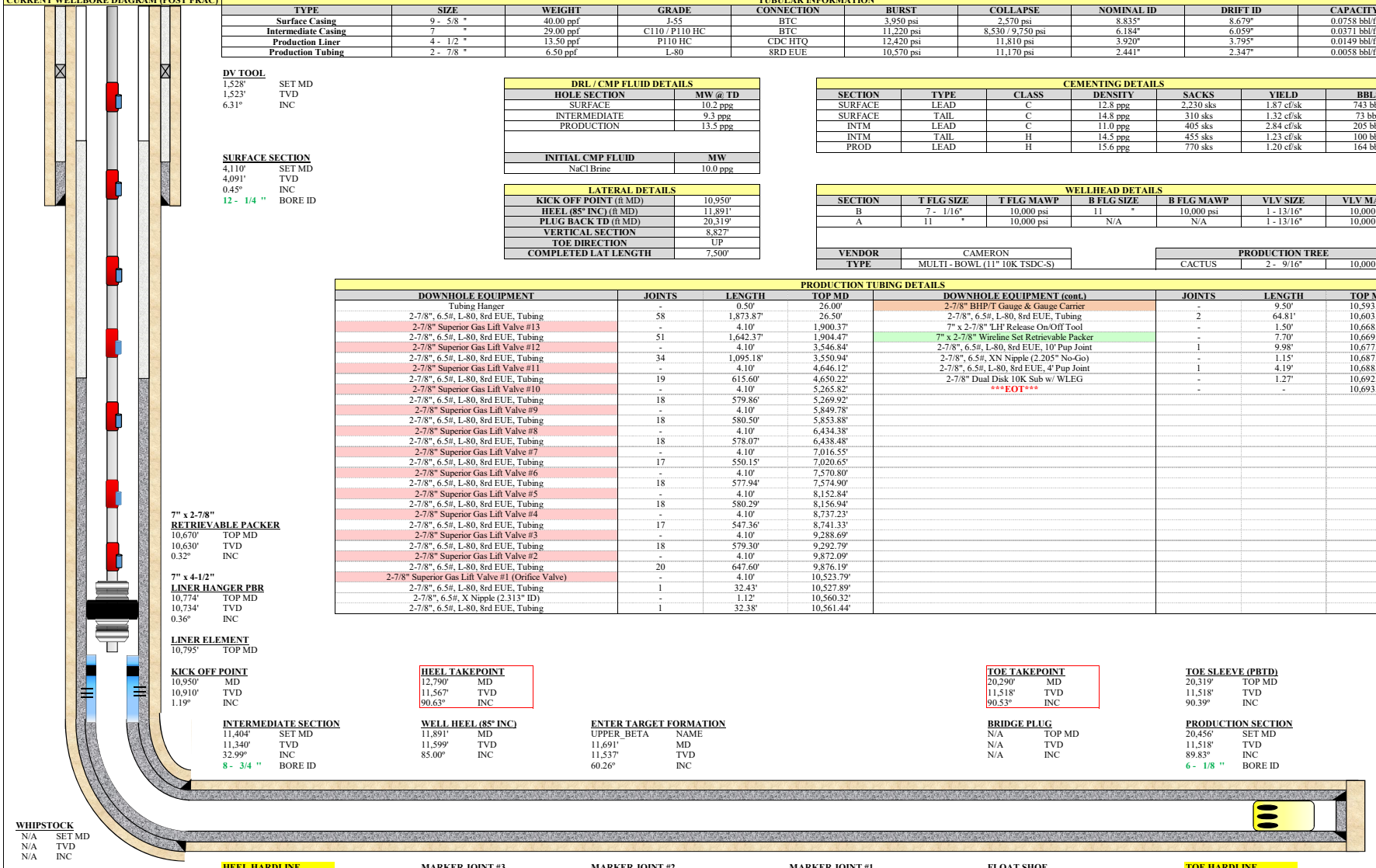
THRESHER 55-1-12 UNIT A 13H

										DATE	7/17/2019
										AUTHOR	M.R. Jones
AFE #	2104336.CMP	COUNTY/STATE	LOVING, TX	GL	3,061'	WI	50.00000%	LAT NAD 27	31.9809642	SPUD DATE	10/2/2017
API #	4230132424	WINS #	J0118	FIELD	PHANTOM	RKB	3,087'	NRI	37.50000%	LONG NAD 27	-103.7143874	TD DATE	11/20/2017

CURRENT WELLBORE DIAGRAM (POST FRAC)



TUBULAR INFORMATION

TYPE	SIZE	WEIGHT	GRADE	CONNECTION	BURST	COLLAPSE	NOMINAL ID	DRIFT ID	CAPACITY
Surface Casing	9 - 5/8 "	40.00 ppf	J-55	BTC	3,950 psi	2,570 psi	8.835"	8.679"	0.0758 bbl/ft
Intermediate Casing	7 "	29.00 ppf	C110 / P110 HC	BTC	11,220 psi	8,530 / 9,750 psi	6.184"	6.059"	0.0371 bbl/ft
Production Liner	4 - 1/2 "	13.50 ppf	P110 HC	CDC HTQ	12,420 psi	11,810 psi	3.920"	3.795"	0.0149 bbl/ft
Production Tubing	2 - 7/8 "	6.50 ppf	L-80	8RD EUE	10,570 psi	11,170 psi	2.441"	2.347"	0.0058 bbl/ft

DV TOOL
1,528' SET MD
1,523' TVD
6.31° INC

SURFACE SECTION
4,110' SET MD
4,091' TVD
0.45° INC
12 - 1/4 " BORE ID

DRL / CMP FLUID DETAILS

HOLE SECTION	MW @ TD
SURFACE	10.2 ppg
INTERMEDIATE	9.3 ppg
PRODUCTION	13.5 ppg

INITIAL CMP FLUID	MW
NaCl Brine	10.0 ppg

LATERAL DETAILS

KICK OFF POINT (ft MD)	10,950'
HEEL (85° INC) (ft MD)	11,891'
PLUG BACK TD (ft MD)	20,319'
VERTICAL SECTION	8,827'
TOE DIRECTION	UP
COMPLETED LAT LENGTH	7,500'

CEMENTING DETAILS

SECTION	TYPE	CLASS	DENSITY	SACKS	YIELD	BBLS
SURFACE	LEAD	C	12.8 ppg	2,230 sks	1.87 cf/sk	743 bbls
SURFACE	TAIL	C	14.8 ppg	310 sks	1.32 cf/sk	73 bbls
INTM	LEAD	C	11.0 ppg	405 sks	2.84 cf/sk	205 bbls
INTM	TAIL	H	14.5 ppg	455 sks	1.23 cf/sk	100 bbls
PROD	LEAD	H	15.6 ppg	770 sks	1.20 cf/sk	164 bbls

WELLHEAD DETAILS

SECTION	T FLG SIZE	T FLG MAWP	B FLG SIZE	B FLG MAWP	VLV SIZE	VLV MAWP
B	7 - 1/16"	10,000 psi	11 "	10,000 psi	1 - 13/16"	10,000 psi
A	11 "	10,000 psi	N/A	N/A	1 - 13/16"	10,000 psi

VENDOR	CAMERON
TYPE	MULTI - BOWL (11" 10K TSDC-S)

PRODUCTION TREE		
CACTUS	2 - 9/16"	10,000 psi

PRODUCTION TUBING DETAILS

DOWNHOLE EQUIPMENT	JOINTS	LENGTH	TOP MD	DOWNHOLE EQUIPMENT (cont.)	JOINTS	LENGTH	TOP MD
Tubing Hanger	-	0.50'	26.00'	2-7/8" BHP/T Gauge & Gauge Carrier	-	9.50'	10,593.82'
2-7/8", 6.5#, L-80, 8rd EUE, Tubing	58	1,873.87'	26.50'	2-7/8", 6.5#, L-80, 8rd EUE, Tubing	2	64.81'	10,603.32'
2-7/8" Superior Gas Lift Valve #13	-	4.10'	1,900.37'	7" x 2-7/8" 'LH' Release On/Off Tool	-	1.50'	10,668.13'
2-7/8", 6.5#, L-80, 8rd EUE, Tubing	51	1,642.37'	1,904.47'	7" x 2-7/8" Wireline Set Retrievable Packer	-	7.70'	10,669.63'
2-7/8" Superior Gas Lift Valve #12	-	4.10'	3,546.84'	2-7/8", 6.5#, L-80, 8rd EUE, 10' Pup Joint	1	9.98'	10,677.33'
2-7/8", 6.5#, L-80, 8rd EUE, Tubing	34	1,095.18'	3,550.94'	2-7/8", 6.5#, XN Nipple (2.205" No-Go)	-	1.15'	10,687.31'
2-7/8" Superior Gas Lift Valve #11	-	4.10'	4,646.12'	2-7/8", 6.5#, L-80, 8rd EUE, 4' Pup Joint	1	4.19'	10,688.46'
2-7/8", 6.5#, L-80, 8rd EUE, Tubing	19	615.60'	4,650.22'	2-7/8" Dual Disk 10K Sub w/ WLEG	-	1.27'	10,692.65'
2-7/8" Superior Gas Lift Valve #10	-	4.10'	5,265.82'	***EOT***	-	-	10,693.92'
2-7/8", 6.5#, L-80, 8rd EUE, Tubing	18	579.86'	5,269.92'				
2-7/8" Superior Gas Lift Valve #9	-	4.10'	5,849.78'				
2-7/8", 6.5#, L-80, 8rd EUE, Tubing	18	580.50'	5,853.88'				
2-7/8" Superior Gas Lift Valve #8	-	4.10'	6,434.38'				
2-7/8", 6.5#, L-80, 8rd EUE, Tubing	18	578.07'	6,438.48'				
2-7/8" Superior Gas Lift Valve #7	-	4.10'	7,016.55'				
2-7/8", 6.5#, L-80, 8rd EUE, Tubing	17	550.15'	7,020.65'				
2-7/8" Superior Gas Lift Valve #6	-	4.10'	7,570.80'				
2-7/8", 6.5#, L-80, 8rd EUE, Tubing	18	577.94'	7,574.90'				
2-7/8" Superior Gas Lift Valve #5	-	4.10'	8,152.84'				
2-7/8", 6.5#, L-80, 8rd EUE, Tubing	18	580.29'	8,156.94'				
2-7/8" Superior Gas Lift Valve #4	-	4.10'	8,737.23'				
2-7/8", 6.5#, L-80, 8rd EUE, Tubing	17	547.36'	8,741.33'				
2-7/8" Superior Gas Lift Valve #3	-	4.10'	9,288.69'				
2-7/8", 6.5#, L-80, 8rd EUE, Tubing	18	579.30'	9,292.79'				
2-7/8" Superior Gas Lift Valve #2	-	4.10'	9,872.09'				
2-7/8", 6.5#, L-80, 8rd EUE, Tubing	20	647.60'	9,876.19'				
2-7/8" Superior Gas Lift Valve #1 (Orifice Valve)	-	4.10'	10,523.79'				
2-7/8", 6.5#, L-80, 8rd EUE, Tubing	1	32.43'	10,527.89'				
2-7/8", 6.5#, X Nipple (2.313" ID)	-	1.12'	10,560.32'				
2-7/8", 6.5#, L-80, 8rd EUE, Tubing	1	32.38'	10,561.44'				

7" x 2-7/8" RETRIEVABLE PACKER
10,670' TOP MD
10,630' TVD
0.32° INC

7" x 4-1/2" LINER HANGER PBR
10,774' TOP MD
10,734' TVD
0.36° INC

LINER ELEMENT
10,795' TOP MD

KICK OFF POINT
10,950' MD
10,910' TVD
1.19° INC

HEEL TAKEPOINT
12,790' MD
11,567' TVD
90.63° INC

TOE TAKEPOINT
20,290' MD
11,518' TVD
90.53° INC

TOE SLEEVE (PBTD)
20,319' TOP MD
11,518' TVD
90.39° INC

INTERMEDIATE SECTION
11,404' SET MD
11,340' TVD
32.99° INC
8 - 3/4 " BORE ID

WELL HEEL (85° INC)
11,891' MD
11,599' TVD
85.00° INC

ENTER TARGET FORMATION
UPPER_BETA NAME
11,691' MD
11,537' TVD
60.26° INC

BRIDGE PLUG
N/A TOP MD
N/A TVD
N/A INC

PRODUCTION SECTION
20,456' SET MD
11,518' TVD
89.83° INC
6 - 1/8 " BORE ID

WHIPSTOCK
N/A SET MD
N/A TVD
N/A INC

BHT
165° F

HEEL HARDLINE
N/A MD
N/A TVD
N/A INC

MARKER JOINT #3
N/A TOP MD
N/A TVD
N/A INC
N/A LENGTH

MARKER JOINT #2
12,448' TOP MD
11,572' TVD
90.78° INC
21' LENGTH

MARKER JOINT #1
19,301' TOP MD
11,525' TVD
89.76° INC
22' LENGTH

FLOAT SHOE
20,456' SET MD
11,518' TVD
89.83° INC

TOE HARDLINE
20,333' MD
11,518' TVD
90.29° INC

CEMENTING NOTES / WELL HISTORY

SURFACE:
RU CEMENT HEAD, CHARGE & TEST LINES TO 3,100 PSI. PUMP 30 BBLS OF FRESH WATER SPACER, LEAD CEMENT 742 BBLS (2,230 SKS) OF 12.8 PPG CLASS "C" PREMIUM PLUS CEMENT @ 1.87 YLD, WITH 6% GEL, 3% SALT, 3 LB/SX KOLSEAL, 1/4 LB/SX , 3% CD-1, .3% CR-1, 2 LB/SK XPC-1, TAIL CMT 72.9 BBLS (310 SKS) OF 14.8 PPG CLASS "C" PREMIUM PLUS CEMENT @ 1.32 YLD, WITH 1% CACL2, .6% CFL-3, .3% CD-1. SHUT DOWN & DROP PLUG. DISPLACE CEMENT WITH 199 BBLS OF FRESH WATER. FINAL LIFT PRESSURE WAS 1,120 PSI @ 4.0 BPM. BUMPED W/ 1,660 PSI, HELD FOR 3 MINS, BLED BACK 2 BBL, FLOATS HOLDING, FULL RETURNS THROUGHOUT CEMENT JOB, 178 BBLS. OF CEMENT RETURNS TO SURFACE (534 SKS). WEATHERFORD DROPPED CANCELATION PLUG AND SHIFTED SLEEVE IN STAGE TOOL WITH 3,000 PSI.

INTERMEDIATE:
TEST LINES TO 4,000 PSI. PUMP 40 BBLS OF GEL SPACER, LEAD CEMENT 204 BBLS, 1,039.2 CU/FT (405 SKS) OF NEOCEM 3 LBM KOL SEAL, .025 LBM POLY-E- FLAKE, 11.0 PPG CLASS "C" PREMIUM PLUS CEMENT @ 2.84 YLD, WITH 5.59 GL/SK FRESH WATER, .5% LAP-1, .5 LB/SX D-AIR 5000, .3% CFR-3, .025% SA-1015. TOP OF LEAD 1,125', TAIL CMT 99.0 BBLS, 542 CU/FT (455 SKS) OF 14.5 PPG CLASS "C" PREMIUM PLUS CEMENT @ 1.23 YLD, WITH 5.22 GL/SX FRESH WATER, .5% LAP-1, .5% D-AIR 5000, .3% CFR-3, .025% SA-1015. SHUT DOWN & DROP PLUG. DISPLACE CEMENT WITH 420 BBLS OF 9.3 PPG BRINE. FINAL LIFT PRESSURE WAS 2,150 PSI @ 3.0 BPM. BUMPED W/ 2,750 PSI, HELD FOR 3 MINS, BLED BACK 3.5 BBL, FLOATS HOLDING, FULL RETURNS THROUGHOUT CEMENT JOB, NO CEMENT RETURNS TO SURFACE.

PRODUCTION:
TEST LINES TO 8500 PSI. PUMP 60 BBLS SPACER, PUMP 770 SX 164 BBLS CEMENT (15.6 PPG, 1.195 YLD). DROP PLUG, DISPLACE W/ 20 BBLS SUGAR WATER, 110 BBLS FRESH WATER, 30 BBLS SUGAR WATER, 99 BBLS 13.3 PPG OBM, TOTAL PUMPED 259 BBLS. BUMP PLUG @ 3.4 BPM WITH 3,095 PSI, PRESSURE UP 1,000 PSI OVER TO 4,095 PSI, HELD 3 MIN, BLEED OFF 3 BBLS, FLOATS HELD, CHECK FLOW AT FLOW LINE, WELL STATIC. STING OUT AND CIRCULATE BOTTOMS UP AT 8 BPM WITH 3,500 PSI, NO CEMENT RETURNED. TEST PACKER AND LINER TO 2,500 PSI FOR 5 MINUTES, GOOD TEST. DISPLACE OBM WITH 10.0 BRINE PACKER FLUID.