## NW Lybrook Unit #134H Lybrook Unit NW HZ (oil)

Spud: 2/26/15 Completed: 8/17/15

Run 10jts., 9- 5/8", 36#, J-55, ST&C csg, set @ 322', FC @ 289' Surface Casing -Hole Size: 12-1/4"

Run 137ts, 7", 23#, J-55 LT&C, 8RD casing set @ 5946' (5508) , FC @ 5902' Intermediate Casing - Hole Size: 8-3/4"

Run 170jts, 4-1/2", P-110, 11.6#, LT&C. 8RD, CSG set @ 13408', LC @ 13314', RSI tools 13308', TOL @ 5805'. Final Casing - Hole Size: 6-1/8"

Land tbg @5981' as Follows, Hanger, KB 25.00' 34 jts. of 2.7/8" 6.5# J-55 tbg, GLV # 9 @ 1,138' 24 jts of 2.7/8 6.5 # J-55 tbg GLV # 8 @ 1,925' 18 jts of 2.7/8 6.5 # J-55 tbg, GLV # 6 @ 3,010' 16 jts of 2.7/8 6.5 # J-55 tbg, GLV # 5 @ 3,536' 15 jts of 2.7/8 6.5 # J-55 tbg, GLV # 4 @ 4,029' 15 jts of 2.7/8 6.5 # J-55 tbg, GLV # 3 @ 4,523' 16 jts of 2.7/8 6.5 # J-55 tbg, GLV # 2 @ 5,049' 12 jts of 2.7/8 6.5 # J-55 tbg, GLV # 4 @ 4,029' 15 jts of 2.7/8 6.5 # J-55 tbg, GLV # 3 @ 4,523' 16 jts of 2.7/8 6.5 # J-55 tbg, GLV # 2 @ 5,049' 12 jts of 2.7/8 6.5 # J-55 tbg, GLV # 1 @ 5,739' 1 jt of 2.7/8 6.5 # J-55 tbg, GLV # 2 @ 5,049' 12 jts of 2.7/8 6.5 # J-55 tbg, GLV # 1 @ 5,739' 1 jt of 2.7/8 6.5 # J-55 tbg, GLV # 1 @ 5,739' 1 jt of 2.7/8 6.5 # J-55 tbg, GLV # 1 @ 5,739' 1 jt of 2.7/8 6.5 # J-55 tbg, GLV # 1 @ 5,739' 1 jt of 2.7/8 6.5 # J-55 tbg, GLV # 1 @ 5,739' 1 jt of 2.7/8 6.5 # J-55 tbg, GLV # 1 @ 5,739' 1 jt of 2.7/8 6.5 # J-55 tbg, GLV # 1 @ 5,739' 1 jt of 2.7/8 6.5 # J-55 tbg, GLV # 1 @ 5,739' 1 jt of 2.7/8 6.5 # J-55 tbg, GLV # 1 @ 5,781' 10 K packer, @ 5,785.43' X over 5 jts 2.375 tbg, @ 5,946' 2.375 X 1.87'' X Nipple' @ 5,948' 1jt of 2.375 4.7# J-55 tbg, G 5,948' 2.375 1/2 Mull shoe @ 5,981' EOT , Packer was set at 10 K Compression, Totol 175 jts 2.7/8 6.5 # J-55 8rd tbg, Total 6 jt 2.375 4.7# J-55 eue 8 rd,

HOLE SIZE	CASING	CEMENT	VOLUME	CMT TOP
12-1/4"	9-5/8"	101 s x	162 cu.ft.	Surface
8-3/4"	7"	1147 sx	1555 cu.ft	Surface
6-1/8"	4-1/2"	780 sx	1061 cu. ft.	TOL 5805'

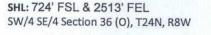
TOL @ 5805'

TD: 13418' MD TVD: 5468' PBTD: 13314' MD

## OIL CONS. DIV DIST. 3

CONFIDENTIAL

AUG 28 2015



BHL: 405' FSL & 230' FWL SW/4 SW/4 Section 35 (M), T24N, R8W

RIO ARRIBA NM Elevation: 6893 API: 30-045-35622

Tops	MD	TVD
OJO ALAMO	1207	1205
KIRKLAND	1344	1340
PICTURE CLIFFS	1832	1824
LEWIS	2025	2016
CHACRA	2263	2252
CLIFF HOUSE	3397	3379
MENEFEE	3448	3429
PT LOOKOUT	4214	4188
MANCOS	4456	4428
GALLUP	4807	4778

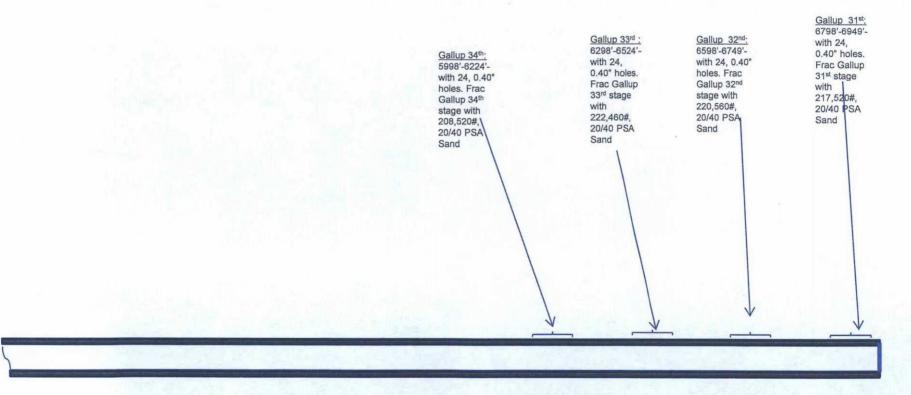
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## NW Lybrook Unit #134H Lybrook Unit NW HZ (oil)(page 2 – lateral with completion)

Gallup 29th: 7198'-7345- with 24, 0.40" holes. Frac Gallup 29 <sup>th</sup> stage with 220,900#, 2014 PSA Sand	Gallup 27th 7598'-7749' with 24, 0,4' holes. Frac Gallup 27 <sup>th</sup> stage with 0 218,260#, 20/40 PSA Sand	Gallup 25th	'- 8398'-8549'- 0" with 24, 0.40"	Gallup 21 <sup>#1</sup> 8800'-8949' with 24, 0.4' holes. Frac Gallup 21 <sup>#1</sup> stage with 40 211,820#, 20/40 PSA Sand		49'- 9598'-97   0.40" with 24, 0   ac holes. Fr   9 <sup>th</sup> Gallup 1'   h stage wit   t, 20/40 215,200#	49'- 9994   0.40" with   rac hole   7th Gall   th stag   #, 20/40 215,	8'-10149'- 1039 24, 0.40" 1054 is. Frac 24, 0 up 15 <sup>th</sup> holes ie with Gallu ,960#, stage 10 PSA 215, 5	8'- 10   9'- with 11   .40" 24   5. Frac hd   up 13 <sup>th</sup> G   9 with st   98.6%, 21   99.75A 20	0798'- with 2 0949'- with holes 4, 0.40" Gallu oles. Frac with 2	0'-11349'- 11600   24, 0.40" with 24   . Frac holes.   p 9th stage Gallup   218,920#, with 21	-11749'- Gallup 5' 4, 0,40" 12004'-1	2149'- 12724'- with 0.40" 24, 0.40" ac holes. Frac Gallup 3rd 140#, stage with SA 226,794#, 20/40 PSA Sand	Gallup 14:13098'- 13239' + RSI TOOL @13308' with 218,660# 20/40 PSA Sand Sallup 2 <sup>nd</sup> :
Gallup 30th; 6998'-7149- with 24, 0.40" holes. Frac Gallup 30 <sup>th</sup> stage with 216,040#, 20/40 PSA Sand	Gallup 28th 7400'- 7549'- with 24, 0.40" holes. Frac Gallup 28 <sup>th</sup> stage with 212,600#, 20/40 PSA Sand	Gallup 26h: 7798'- 7949'- with 24, 0.40" holes. Frac Gallup 26 <sup>th</sup> stage with 214,200#, 20/40 PSA Sand	Gallup 24th: 8198'-8345'- with 24, 0.40" holes. Frac Gallup 24 <sup>th</sup> stage with 217,080#, 20/40 PSA Sand	Gallup 22 <sup>nd</sup> , 8598'-8749'- with 24, 0.40" holes. Frac Gallup 22 <sup>nd</sup> stage with 218,820#, 20/40 PSA Sand	Gallup 20th: 8998'-9149'- with 24, 0.40' holes. Frac Gallup 20 <sup>th</sup> stage with 216,040#, 20/40 PSA Sand	Gallup 18th: 9398'-9549'- with 24, 0.40" holes. Frac Gallup 18 <sup>th</sup> stage with 218,980#, 20/40 PSA Sand	Gallup 16th; 9798'-9949'- with 24, 0.40' holes. Frac Gallup 16 <sup>th</sup> stage with 220,840 <i>H</i> , 20/40 PSA Sand	Gallup 14th: 10198'- 10349'- with 24, 0.40° holes. Frac Gallup 14 <sup>th</sup> stage with 211,180#, 20140 PSA Sand	Gallup 12th 10602 <sup>-</sup> 10749 <sup>-</sup> with 24, 0.40° holes. Frac Gallup 12 <sup>th</sup> stage with 220,360# 20/40 PSA Sand	h 11146'- with 24, 0,40"	Gallup 8 <sup>th</sup> - 11398'- 11549'- with 24, 0.40° holes. Frac Gallup 8 <sup>th</sup> stage with 217,040#, 20/40 PSA Sand	Gallup 6 <sup>th</sup> : 11798'- 11945'- with 24, 0.40° holes. Frac Gallup 6 <sup>th</sup> stage with 217,220#, 20/40 PSA Sand	Gallup 4 <sup>th</sup> ; 1   12198'- 1   12424'- with 2   24, 0.40" h   holes. Frac G   Gallup 4 <sup>th</sup> s   stage with 2   219,720#, 2	2798'- 3023'- with 4, 0.40" oles. Frac allup 2 <sup>nd</sup> tage with 15,640 <i>#</i> , 0/40 PSA and
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See page 1 for upper portion of hole

## NW Lybrook Unit #134H Lybrook Unit NW HZ (oil)(page 2 – lateral with completion)



See page 2 for upper portion of hole