

Operator

Caza Operating LLC

Well Name & No.

Engleclaw 3H

County

Lea

Location (S/T/R/Alt)

Lease Number

ATS or EC #

Colors:

Choose casings

Fill in, if applicable

Name

Date

Version

Remarks

ral 6H Lea NM114998 Caza Operating LLC 13-22 10052019 LV

APD### or EC###

Type of Casing	Size of Hole (in)	Size of Casing (in)	Weight per Foot (lbs/ft)	Grade	Yield	Coupling #:	Top (ft)	Bottom (MD) (ft)	Setting Depth (TVD) (TVD of entire string) (ft)	Min Mud Weight (ppg)	Max Mud Weight (ppg)	ID	Drift ID	Cplg OD
Surface	17.500	13.375	54.50	j	55	stc	0	2000	2000	8.40	8.90	12.6150	12.4900	14.3750
Int 1	12.250	9.625	40.00	hcl	80	btc	0	5442	5442	9.20	10.00	8.8350	8.7500	10.6250
Int 1 Taper 1														
<Choose Casing>														
Prod 1	8.750	6.000	24.50	p	110	btc	0	19100	11497	9.20	10.00	5.2000	5.0750	6.8750
<Choose Casing>														
<Choose Casing>														

Cement														
Surface			Int 1			Prod 1			<Choose Casing>			<Choose Casing>		
TOC	0		TOC	0		TOC	0		TOC			TOC		
DV Depth			DV Depth	3900		DV Depth			DV Depth			DV Depth		
Sacks		Yield (ft3/sx)			Yield (ft3/sx)	Sacks		Yield (ft3/sx)	Sacks		Yield (ft3/sx)	Sacks		Yield (ft3/sx)
Lead	1230	1.93	Lead	305	2.13	Lead 1	2100	2.38	Lead 1			Lead 1		
Tail	309	1.35	Tail	232	1.35	Tail 1	2200	1.62	Tail 1			Tail 1		
DV Lead			DV Lead	1140	2.13	DV Lead			DV Lead			DV Lead		
DV Tail			DV Tail	150	1.35	DV Tail			DV Tail			DV Tail		
Cmt Added	2791.05	cuft	Cement Added	962.9 / 2630.7	cuft	Cement Added	8562.00	cuft	Cement Added	#N/A	cuft	Cement Added	#N/A	cuft
Cmt Req.	1389	cuft	Cement Req.	482.9 / 1320.4	cuft	Cement Req.	4270	cuft	Cement Req.	0	cuft	Cement Req.	0	cuft
Excess	100.9%		Excess	99.4% / 99.2%		Excess	100.52%		Excess	#N/A		Excess	#N/A	

Clearances	in Hole	In Surface	In Int 1	In Int 1 Taper 1		In Prod 1		
Surface	Pass = 1.5625							
Int 1	Pass = 0.8125	Pass = 0.995						
Int 1 Taper 1								
Prod 1	Pass = 0.9375	Pass = 2.87	Pass = 0.98	No Overlap	No Overlap			

Safety Factors	Joint/Body	Collapse	Burst	Alt Burst
Surface	4.72	1.22	0.97	1.68
Int 1	4.21	1.50	0.96	1.67
Int 1 Taper 1				
Prod 1	2.85	1.91	2.15	3.73

BOP Requirements After the Shoe				
Surface		Int 1		Prod 1
Max. Surf. Pressure	1630 psi	Max. Surf. Pressure	3443 psi	Max. Surf. Pressur psi
BOP Required	2M System	BOP Required	5M System	BOP Required System
<Choose Casing>				
Max. Surf. Pressure	psi			
BOP Required	System			