

Well Name: BIG BUCKS FED COM	Well Location: T21S / R32E / SEC 12 / NENE / 32.500491 / -103.621126	County or Parish/State: LEA / NM
Well Number: 502H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM0553706	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002547435	Well Status: Approved Application for Permit to Drill	Operator: ASCENT ENERGY LLC

Notice of Intent

Type of Submission: Notice of Intent	Type of Action Other
Date Sundry Submitted: 03/15/2021	Time Sundry Submitted: 02:06
Date proposed operation will begin: 03/17/2021	
Procedure Description: Ascent Energy respectfully requests approval for proposed casing diameter changes in the vertical section of the Big Bucks Fed Com 502H. Please see attached document for proposed changes.	

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Big_Bucks_Casing_Sundry_draft_502H_v6_final_FINAL_20210315140633.pdf

Conditions of Approval

Additional Reviews

12_21S_32E_A_ATS_20_1540_Big_Bucks_Fed_Com_502H_Lea_NMNM0553706_Ascent_Energy_LLC_13_22b_03_15_2021_Yolanda_Jimenez_20210316043924.pdf

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Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: METZ **Signed on:** MAR 15, 2021 02:06 PM

Name: ASCENT ENERGY LLC

Title: Vice President Exploration

Street Address: 1621 18th Street, Suite 200

City: Denver **State:** CO

Phone: (720) 710-8999

Email address:

Field Representative

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS **BLM POC Title:** Petroleum Engineer

BLM POC Phone: 5752342234 **BLM POC Email Address:** cwalls@blm.gov

Disposition: Approved **Disposition Date:** 03/16/2021

Signature: Chris Walls

Ascent Energy respectfully requests approval for an option to increase the casing size of our vertical casing strings for the Big Bucks Fed Com 502H.

The reason for the request is based on improved drilling efficiencies and improved cementing in-place for each casing string. We believe the larger casing diameters in the vertical section will increase the likelihood of getting cement to surface for each string.

There will be no change in Geology formations, BOP and mud specifications.

New/Optional proposed design:

Casing:

Interval	Hole Size (in)	Interval MD		Interval TVD		Casing OD (in)	Weight (lb/ft)	Grade	Conn/ Joint Type	Standard	Tapered	DF Collapse	DF Burst	DF Tension
Conductor	36	0	10	0	10	30			weld	API	N			
Surface	26	0	1661	0	1661	20	94	J55	BTC	API	No	2.25	3.04	11.69
Intermediate 1	17.5	0	3257	0	3246	13.375	54.5	J55	BTC	API	No	2.29	2.08	7.49
Intermediate 2	12.25	0	5819	0	5751	9.625	40	J55	BTC	API	No	2.68	1.37	2.6
Production	8.75	0	17248	0	10871	5.5	20	P110	BTC	API	No	1.92	2.18	3.12

Cement:

Section	Depth	Type	Cmt Top	Excess %	Cu Ft	Quantity (sks)	BBLs	Density (Weight ppg)	Yield (ft3/sx)	Mix Water Gal/sx	Slurry Description	
Surface	20"	Lead	0	100%	3285	1720	585	13.5	1.72	9.11	Class C	HALCEM system + 4% bentonite
	1661'	Tail	1100	100%	1595	640	284	14.8	1.33	6.32	Class C	HALCEM system
Intermediate 1	13.375	Lead	0	50%	3223	1390	574	12.7	2.32	13	Class C	HALCEM system + 4% bentonite
	3257	Tail	2757	50%	730	550	130	14.8	1.33	6.32	Class C	HALCEM system
Intermediate 2	9.625	Lead	0	50%	2156	980	384	11.5	2.20	11.05	Class C	EconoCem HLC + 5% salt +3% Microbond +3 lbs/sk Kol-seal + 0.3% HR-800
	5819	Tail	5319	50%	112	195	20	14.8	1.33	6.32	Class C	HALCEM system +3% Microbond
Intermediate 2 DV Stage 2	9.625	Lead	0	50%	1112	480	198	11.5	2.32	13.01	Class C	EconoCem HLC + 5% salt +3% Microbond +3 lbs/sk Kol-seal + 0.3% HR-800
	5819	Tail	3057	50%	191	145	34	14.8	1.33	6.32	Class C	HALCEM system +3% Microbond
Production	5.5	Lead	0	25%	2678	1080	477	11	2.48	15.36	Neo Cem PL	3% Microbond
	17248	Tail	9000	25%	2617	1780	466	13.2	1.47	6.94	Neo Cem PL	3% Microbond

Note: Int 2 is two stage cement job. DVT to be placed @ approximately 3636'. Will be adjusted real time

12-21S-32E-A ATS-20-1540 Big Bucks Fed Com 502H Lea NMNM0553706 Ascent Energy LLC 13-22b 03-15-2021
Yolanda Jimenez

Big Bucks Fed Com 502H

20	surface csg in a	26	inch hole.	Design Factors				Surface			
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	94.00	J 55	BTC	8.90	0.62	1.23	1,675	3	2.14	1.11	157,450
"B"			BTC				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 746				Tail Cmt	does not	circ to sfc.	Totals:	1,675			157,450
Comparison of Proposed to Minimum Required Cement Volumes											
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg
26	1.5053	2360	3810	2521	51	9.60	988	2M			2.50
Site plat (pipe racks S or E) as per O.O.I.I.D 4.1. not found.											

13 3/8	casing inside the	20	Design Factors					Int 1				
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	54.50	J 55	BTC	4.74	0.66	1.06	3,300	2	2.09	1.14	179,850	
"B"								0				0
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	3,300				179,850
The cement volume(s) are intended to achieve a top of				0	ft from surface or a			1675				overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE				Min Dist Hole-Cplg
17 1/2	0.6946	1940	3956	2836	40	10.00	1304	2M				1.56
Class 'H' tail cmt yld > 1.20												

9 5/8	casing inside the		13 3/8	Design Factors					Int 2		
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	40.00	J 55	BTC	2.74	1	0.74	5,819	2	1.33	1.97	232,760
"B"							0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 255							Totals:	5,819			232,760
The cement volume(s) are intended to achieve a top of					0	ft from surface or a		3300			overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg
12 1/4	0.3132	1175	2415	1986	22	8.60	2973	3M			0.81
Burst Frac Gradient(s) for Segment(s): A, B, C, D = 0.69,											

5 1/2	casing inside the		9 5/8	Design Factors					Prod 1			
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	20.00	P 110		BTC	2.95	2.07	2.36	17,248	2	4.25	3.73	344,960
"B"								0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,392								Totals:	17,248			344,960
The cement volume(s) are intended to achieve a top of					0	ft from surface or a		5819				overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cplg
8 3/4	0.2526	2860	5295	4404	20	9.50						1.35
Class 'H' tail cmt yld > 1.20			Capitan Reef est top XXXX.									

District I

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District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 21356

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
ASCENT ENERGY, LLC. 1125 17th St Suite 410 Denver, CO80202	325830	21356	C-103A

OCD Reviewer	Condition
pkautz	None