U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Sundry Print Report

Well Name: BIG BUCKS FED COM Well Location: T21S / R32E / SEC 12 / County or Parish/State: LEA /

NENE / 32.500491 / -103.621126

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 Operator: ASCENT ENERGY

Permit to Drill 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

Page 1 of 2

eived by OCD: 3/19/2021 9:09:31 AM Well Name: BIG BUCKS FED COM

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Well Status: Approved Application for

Permit to Drill

Operator: ASCENT ENERGY LLC

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

Page 2 of 2

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:

	Hole Size					Casing	Weight		Conn/ Joint			DF	DF	DF
Interval	(in)	Interv	al MD	Interv	al TVD	OD (in)	(lb/ft)	Grade	Type	Standard	Tapered	Collapse	Burst	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:

								Density		Mix		
		_				Quantity		(Weight	Yield	Water		
Section	Depth	Type	Cmt Top	Excess %	Cu Ft	(sks)	BBLS	ppg)	(ft3/sx)	Gal/sx		Slurry Description
Surface	20"	Lead	0	100%	3285	1720	585	13.5	1.72	9.11	Class C	HALCEM system + 4% bentonite
Juliace	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
intermediate 1	3257		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
Dan dan et a e	5.5	Lead	0	25%	2678	1080	477	11	2.48	15.36	Neo Cem PL	3% Microbond
Production	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		26	inch hole.		<u>Design</u>				Surfac		
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weigh
"A"	94.00	J	55	BTC	8.90	0.62	1.23	1,675	3	2.14	1.11	157,45
"B"				BTC				0				0
	g mud, 30min Sf			Tail Cmt	does not	circ to sfc.	Totals:	1,675				157,45
			equired Ceme									
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Dis
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cp
26	1.5053	2360	3810	2521	51	9.60	988	2M				2.50
					Site plat (pip	e racks S or E)	as per 0.0.1.l	III.D.4.i. not f	ound.			
13 3/8	casing in	side the	20			Design	Factors			Int 1		
Segment	#/ft	Grade	20	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weigh
"A"	54.50		55	BTC	4.74	0.66	1.06		2		1.14	179,85
"B"	34.30	J	33	ыс	4.74	0.00	1.00	3,300 0		2.09	1.14	179,00
	/g mud, 30min Sf	c Cca Tost psia:					Totals:	3.300				179,85
	-		intended to a	chieve a top of	0	ft from su		1 675				overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Reg'd				Min Di
		•	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-C
	Volume	CmtSv			/U LACCOS	WIGG TTE	MAGI	DUPE				
Size 17 1/2	Volume 0.6946 at yld > 1.20	Cmt Sx 1940	3956	2836	40	10.00	1304	2M				1.56
Size 17 1/2 lass 'H' tail cm	0.6946 nt yld > 1.20	1940	3956		40			2M		Int 2		1.56
Size 17 1/2 lass 'H' tail cm	0.6946 nt yld > 1.20 casing ins	1940		2836		Design Fa	ctors		₽@c	Int 2		
Size 17 1/2 lass 'H' tail cm 9 5/8 Segment	0.6946 nt yld > 1.20 casing ins	1940 side the Grade	3956 13 3/8	2836 Coupling	Body	<u>Design Fa</u> Collapse	ctors Burst	Length	B@s	a-B	a-C	Weigl
Size 17 1/2 lass 'H' tail cm 9 5/8 Segment "A"	0.6946 nt yld > 1.20 casing ins	1940 side the Grade	3956	2836		Design Fa	ctors	Length 5,819	B@s 2			Weigl 232,76
Size 17 1/2 17 1/2 lass 'H' tail cm 9 5/8 Segment "A" "B"	0.6946 ht yld > 1.20 casing ins #/ft 40.00	1940 side the Grade	3956 13 3/8 55	2836 Coupling	Body	<u>Design Fa</u> Collapse	ctors Burst 0.74	Length 5,819		a-B	a-C	Weigl 232,76
Size 17 1/2 lass 'H' tail cm 9 5/8 Segment "A" "B" w/8.4#,	0.6946 ht yld > 1.20 casing ins #/ft 40.00	1940 Side the Grade Grade C Csg Test psig:	3956 13 3/8 55 255	2836 Coupling BTC	Body 2.74	Design Fa Collapse	Ctors Burst 0.74 Totals:	Length 5,819 0 5,819		a-B	a-C	Weigl 232,76 0 232,76
Size 17 1/2 lass 'H' tail cm 9 5/8 Segment "A" "B" w/8.4#/	0.6946 ht yld > 1.20 casing ins #/ft 40.00 /g mud, 30min Sf The cement vo	1940 Side the Grade J c Csg Test psig: blume(s) are	3956 13 3/8 55 255 intended to ac	2836 Coupling BTC Chieve a top of	Body 2.74	Design Fa Collapse 1 ft from su	Ctors Burst 0.74 Totals:	Length 5,819 0 5,819 3300		a-B	a-C	Weigl 232,76 0 232,76 overlap.
Size 17 1/2 17 1/2 lass 'H' tail cm 9 5/8 Segment "A" "B" w/8.4#/	casing ins #/ft 40.00 /g mud, 30min Sf The cement vo	1940 Side the Grade J c Csg Test psig: blume(s) are 1 Stage	3956 13 3/8 55 255 intended to ac 1 Stage	2836 Coupling BTC Chieve a top of Min	Body 2.74 0 1 Stage	Design Fa Collapse 1 ft from su Drilling	Eurst 0.74 Totals: urface or a Calc	Length 5,819 0 5,819 3300 Req'd		a-B	a-C	Weigl 232,76 0 232,76 overlap. Min Di
Size 17 1/2 lass 'H' tail cm 9 5/8 Segment "A" "B" w/8.4#/	0.6946 ht yld > 1.20 casing ins #/ft 40.00 /g mud, 30min Sf The cement vo	1940 Side the Grade J c Csg Test psig: blume(s) are	3956 13 3/8 55 255 intended to ac	2836 Coupling BTC Chieve a top of	Body 2.74	Design Fa Collapse 1 ft from su	Ctors Burst 0.74 Totals:	Length 5,819 0 5,819 3300		a-B	a-C	232,76 0 232,76 overlap. Min Dis
Size 17 1/2 lass 'H' tail cm 9 5/8 Segment "A" "B" w/8.4#, Hole Size 12 1/4	casing ins #/ft 40.00 /g mud, 30min Sf The cement vo Annular Volume 0.3132	1940 Side the Grade J C Csg Test psig: Dlume(s) are 1 Stage Cmt Sx 1175	3956 13 3/8 55 255 intended to ac 1 Stage CuFt Cmt 2415	Coupling BTC Chieve a top of Min Cu Ft	Body 2.74 0 1 Stage % Excess	Design Fa Collapse 1 ft from su Drilling Mud Wt	Ctors Burst 0.74 Totals: urface or a Calc MASP	Length 5,819 0 5,819 3300 Req'd BOPE		a-B	a-C	Weigh 232,76 0 232,76 overlap. Min Dis Hole-Cp
Size 17 1/2 lass 'H' tail cm 9 5/8 Segment "A" "B" w/8.4#/ Hole Size 12 1/4 urst Frac Grad	casing ins #/ft 40.00 /g mud, 30min Sf The cement vo Annular Volume 0.3132	side the Grade J c Csg Test psig: blume(s) are 1 Stage Cmt Sx 1175 ment(s): A, B	3956 13 3/8 55 255 intended to ac 1 Stage CuFt Cmt 2415 , C, D = 0.69,	Coupling BTC Chieve a top of Min Cu Ft	Body 2.74 0 1 Stage % Excess	Design Fa Collapse 1 ft from su Drilling Mud Wt 8.60	Ctors Burst 0.74 Totals: urface or a Calc MASP 2973	Length 5,819 0 5,819 3300 Req'd BOPE		a-B 1.33	a-C 1.97	Weigh 232,76 0 232,76 overlap. Min Dis Hole-Cp
Size 17 1/2 17 1/2 18 17 1/2 18 18 18 18 18 18 18 18 18 18 18 18 18 1	casing ins #/ft 40.00 /g mud, 30min Sf The cement vo Annular Volume 0.3132 dient(s) for Seg	side the Grade J c Csg Test psig: blume(s) are 1 Stage Cmt Sx 1175 ment(s): A, B	3956 13 3/8 55 255 intended to ac 1 Stage CuFt Cmt 2415	Coupling BTC Chieve a top of Min Cu Ft 1986	Body 2.74 0 1 Stage % Excess 22	Design Fa Collapse 1 ft from su Drilling Mud Wt 8.60 Design	Ctors Burst 0.74 Totals: urface or a Calc MASP 2973	Length 5,819 0 5,819 3300 Req'd BOPE 3M	2	a-B 1.33	a-C 1.97	Weigh 232,76 0 232,76 overlap. Min Dis Hole-Cp 0.81
Size 17 1/2 ass 'H' tail cm 9 5/8 Gegment "A" "B" w/8.4#/ Hole Size 12 1/4 urst Frac Grace 5 1/2 Gegment	casing ins #/ft 40.00 /g mud, 30min sf The cement vo Annular Volume 0.3132 dient(s) for Seg casing ins	side the Grade J c Csg Test psig: blume(s) are 1 Stage Cmt Sx 1175 ment(s): A, B	3956 13 3/8 55 255 intended to ac 1 Stage CuFt Cmt 2415 , C, D = 0.69,	Coupling BTC Chieve a top of Min Cu Ft 1986 Coupling	Body 2.74 0 1 Stage % Excess 22	Design Fa Collapse 1 ft from su Drilling Mud Wt 8.60 Design Collapse	Ctors Burst 0.74 Totals: urface or a Calc MASP 2973	Length 5,819 0 5,819 3300 Req'd BOPE 3M	2 B@s	a-B 1.33 Prod: a-B	a-C 1.97	Weigl 232,76 0 232,76 overlap. Min Di. Hole-C ₁ 0.81
Size 17 1/2 2 ass 'H' tail cm 9 5/8 6egment "A" "B" w/8.4#/ Hole Size 12 1/4 21/4 5 1/2 6egment "A"	casing ins #/ft 40.00 /g mud, 30min Sf The cement vo Annular Volume 0.3132 dient(s) for Seg	side the Grade J c Csg Test psig: blume(s) are 1 Stage Cmt Sx 1175 ment(s): A, B	3956 13 3/8 55 255 intended to ac 1 Stage CuFt Cmt 2415 , C, D = 0.69,	Coupling BTC Chieve a top of Min Cu Ft 1986	Body 2.74 0 1 Stage % Excess 22	Design Fa Collapse 1 ft from su Drilling Mud Wt 8.60 Design	Ctors Burst 0.74 Totals: urface or a Calc MASP 2973	Length 5,819 0 5,819 3300 Req'd BOPE 3M	2	a-B 1.33	a-C 1.97	Weigl 232,70 0 232,70 overlap. Min Di Hole-C 0.81
Size 17 1/2 17 1/2 18 17 1/2 18 18 18 18 18 18 18 18 18 18 18 18 18 1	casing ins #/ft 40.00 /g mud, 30min sf The cement vo Annular Volume 0.3132 dient(s) for Seg casing ins #/ft 20.00	side the Grade J c Csg Test psig: plume(s) are 1 Stage Cmt Sx 1175 ment(s): A, B	3956 13 3/8 55 255 intended to ac 1 Stage CuFt Cmt 2415 , C, D = 0.69, 9 5/8 110	Coupling BTC Chieve a top of Min Cu Ft 1986 Coupling	Body 2.74 0 1 Stage % Excess 22	Design Fa Collapse 1 ft from su Drilling Mud Wt 8.60 Design Collapse	Ctors Burst 0.74 Totals: urface or a Calc MASP 2973 Factors Burst 2.36	Length 5,819 0 5,819 3300 Req'd BOPE 3M Length 17,248 0	2 B@s	a-B 1.33 Prod: a-B	a-C 1.97	Weigl 232,70 0 232,70 overlap. Min Di Hole-C 0.81
Size 17 1/2 17 1/2 18 17 1/2 18 18 18 18 18 18 18 18 18 18 18 18 18 1	casing ins #/ft 40.00 /g mud, 30min Sf The cement vo Annular Volume 0.3132 dient(s) for Seg casing ins #/ft 20.00	side the Grade J c Csg Test psig: plume(s) are 1 Stage Cmt Sx 1175 ment(s): A, B	3956 13 3/8 55 255 intended to ac 1 Stage CuFt Cmt 2415 , C, D = 0.69, 9 5/8 110 2,392	Coupling BTC Chieve a top of Min Cu Ft 1986 Coupling BTC	Body 2.74 0 1 Stage % Excess 22 Body 2.95	Design Fa Collapse 1 ft from su Drilling Mud Wt 8.60 Design Collapse 2.07	Ctors Burst 0.74 Totals: Irface or a Calc MASP 2973 Factors Burst 2.36 Totals:	Length 5,819 0 5,819 3300 Req'd BOPE 3M Length 17,248 0	2 B@s	a-B 1.33 Prod: a-B	a-C 1.97	Weigl 232,70 0 232,70 overlap. Min Di Hole-C 0.81 Weigl 344,90 0 344,90
Size 17 1/2 17 1/2 18 17 1/2 18 18 18 18 18 18 18 18 18 18 18 18 18 1	casing ins #/ft 40.00 /g mud, 30min Sf The cement vo Annular Volume 0.3132 dient(s) for Seg casing ins #/ft 20.00	side the Grade J c Csg Test psig: plume(s) are 1 Stage Cmt Sx 1175 ment(s): A, B side the Grade P c Csg Test psig: plume(s) are	3956 13 3/8 55 255 intended to ac 1 Stage CuFt Cmt 2415 , C, D = 0.69, 9 5/8 110 2,392 intended to ac intended to ac	Coupling BTC Chieve a top of Min Cu Ft 1986 Coupling BTC	Body 2.74 0 1 Stage % Excess 22 Body 2.95	Design Fa Collapse 1 ft from su Drilling Mud Wt 8.60 Design Collapse 2.07	Ctors Burst 0.74 Totals: Inface or a Calc MASP 2973 Factors Burst 2.36 Totals: Inface or a	Length 5,819 0 5,819 3300 Req'd BOPE 3M Length 17,248 0 17,248 5819	2 B@s	a-B 1.33 Prod: a-B	a-C 1.97	Weigi 232,7(0 232,7(overlap. Min Di Hole-Ci 0.81
Size 17 1/2 17 1/2 18 17 1/2 18 17 1/2 18 18 18 18 18 18 18 18 18 18 18 18 18 1	casing ins #/ft 40.00 /g mud, 30min Sf The cement vo Annular Volume 0.3132 dient(s) for Seg casing ins #/ft 20.00 /g mud, 30min Sf The cement vo Annular	side the Grade J c Csg Test psig: clume(s) are 1 Stage Cmt Sx 1175 ment(s): A, B side the Grade P c Csg Test psig: clume(s) are	3956 13 3/8 55 255 intended to ac 1 Stage CuFt Cmt 2415 , C, D = 0.69, 9 5/8 110 2,392 intended to ac 1 Stage	Coupling BTC Chieve a top of Min Cu Ft 1986 Coupling BTC Chieve a top of Min	Body 2.74 0 1 Stage % Excess 22 Body 2.95 0 1 Stage	Design Fa Collapse 1 ft from su Drilling Mud Wt 8.60 Design Collapse 2.07 ft from su Drilling	Ctors Burst 0.74 Totals: Irface or a Calc MASP 2973 Factors Burst 2.36 Totals: Irface or a Calc	Length 5,819 0 5,819 3300 Req'd BOPE 3M Length 17,248 0 17,248 5819 Req'd	2 B@s	a-B 1.33 Prod: a-B	a-C 1.97	Weigl 232,70 0 232,70 overlap. Min Di Hole-C 0.81 Weigl 344,90 overlap. Min Di
Size 17 1/2 17 1/2 18 17 1/2 18 18 18 18 18 18 18 18 18 18 18 18 18 1	casing ins #/ft 40.00 /g mud, 30min Sf The cement vo Annular Volume 0.3132 dient(s) for Seg casing ins #/ft 20.00	side the Grade J c Csg Test psig: plume(s) are 1 Stage Cmt Sx 1175 ment(s): A, B side the Grade P c Csg Test psig: plume(s) are	3956 13 3/8 55 255 intended to ac 1 Stage CuFt Cmt 2415 , C, D = 0.69, 9 5/8 110 2,392 intended to ac intended to ac	Coupling BTC Chieve a top of Min Cu Ft 1986 Coupling BTC	Body 2.74 0 1 Stage % Excess 22 Body 2.95	Design Fa Collapse 1 ft from su Drilling Mud Wt 8.60 Design Collapse 2.07	Ctors Burst 0.74 Totals: Inface or a Calc MASP 2973 Factors Burst 2.36 Totals: Inface or a	Length 5,819 0 5,819 3300 Req'd BOPE 3M Length 17,248 0 17,248 5819	2 B@s	a-B 1.33 Prod: a-B	a-C 1.97	Weigl 232,70 0 232,70 overlap. Min Di Hole-Cl 0.81 Weigl 344,90 0 344,90 overlap.

Carlsbad Field Office 3/16/2021

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III
1000 Rio Brazos Rd., Aztec, NM 87410

Phone:(505) 334-6178 Fax:(505) 334-6170 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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	325830	21356	C-103A
Suite 410	Denver, CO80202			

OCD Reviewer	Condition
pkautz	None