			<u> </u>		FI.
³ om 3160 - 3 (March 2012)		60	N N	FORM OMB I	APPROVED No. 1004-0137 Detaber 31, 2014
UNITED STATI DEPARTMENT OF THE	ES INTERIOR	APS .	018	5. Lease Serial No. NMNM136226	
APPLICATION FOR PERMIT TO	D DRILL OF	CREENTER "	NE	6. If Indian, Allotee	or Tribe Name
la. Type of work: 🗹 DRILL 🗌 REEN	TER	OF	J	7. If Unit or CA Agr	eement, Name and No.
lb. Type of Well: 🖌 Oil Well 🗍 Gas Well 🗍 Other	Si	ngle Zone 🔲 Multi	ple Zone	8. Lease Name and LESLIE FED CON	Well No. 720549 1215H
2. Name of Operator MATADOR PRODUCTION COMPAN	vy (228	937)		9. API Well No. 30-02	25-44546
3a. Address 5400 LBJ Freeway, Suite 1500 Dallas TX 75	3b. Phone No 24 (972)371-5). (include area code) 5200		10. Field and Pool, or DOGIE DRAW / D	Exploratory 17980 ELAWARE
 Location of Well (Report location clearly and in accordance with At surface SWSW / 295 FSL / 1232 FWL / LAT 32.123 	any State requirem 39531 / LONG	nents.*) -103.39 <u></u> 41129		11. Sec., T. R. M. or E SEC 17 / T25S / R	31k. and Survey or Area
At proposed prod. zone NWNW / 240 FNL / 988 FWL / L	AT 32.136995	8 / LONG -103.394	8878		
 Distance in miles and direction from nearest town or post office* miles 				12. County or Parish LEA	NM
 Distance from proposed* location to nearest 295 feet property or lease line, ft. (Also to nearest drig. unit line, if any) 	16. No. of a 799.2	acres in lease	17. Spacir 160	ng Unit dedicated to this	well
 B. Distance from proposed location* to ncarest well, drilling, completed, 30 feet applied for, on this lease, ft. 	19. Propose 12583 fee	d Depth t / 17309 feet	20. BLM/ FED: N	BIA Bond No. on file MB001079	
Elevations (Show whether DF, KDB, RT, GL, etc.) 3311 feet	22 Approxi 12/01/201	mate date work will sta 17	 urt* _. .	23. Estimated duration 90 days	n.
	24. Atta	chments			
he following, completed in accordance with the requirements of Ons	hore Oil and Gas	Order No.1, must be a	ittached to th	is form:	
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Syste SUPO must be filed with the appropriate Forest Service Office). 	em Lands, the	 Bond to cover t Item 20 above). Operator certifi Such other site BLM 	the operation cation specific inf	ons unless covered by an ormation and/or plans a	n existing bond on file (see as may be required by the
25. Signature (Electronic Submission)	Name Brian	(Printed/Typed) Wood / Ph: (505)4	166-8120		Date 10/13/2017
Title	I	····		<u> </u>	<u> </u>
Approved by (Signature)	Name	(Printed/Typed)			Date
(Electronic Submission)	Cody	Layton / Ph: (575)	234-5959		02/26/2018
itte Supervisor Multiple Resources	CAR	LSBAD			
Application approval does not warrant or certify that the applicant h onduct operations thereon. Conditions of approval, if any, are attached.	olds legal or equi	itable title to those right	its in the su	bject lease which would	entitle the applicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a	a crime for any p	erson knowingly and	willfully to r	nake to any department	or agency of the United
states any faise, fictitious or fraudulent statements of representations					
(Continued on page 2) $(-CP 2/27)$	118			*(Ins	tructions on page 2)
		rovnIT	IONS	2	01/18
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ADDR)VKN MI				
ATTA	ovol Data	07/76/7010			
ppr	oval Dates	. 02/20/2010			

* Ochole

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INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts. ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Continued on page 3)

(Form 3160-3, page 2)

Approval Date: 02/26/2018

Additional Operator Remarks

Location of Well

SHL: SWSW / 295 FSL / 1232 FWL / TWSP: 25S / RANGE: 35E / SECTION: 17 / LAT: 32.1239531 / LONG: -103.3941129 (TVD: 0 feet, MD: 0 feet)
 PPP: NWNW / 1320 FNL / 988 FWL / TWSP: 25S / RANGE: 35E / SECTION: 17 / LAT: 32.134003 / LONG: -103.394889 (TVD: 12583 feet, MD: 16220 feet)
 PPP: SWNW / 2640 FNL / 988 FWL / TWSP: 25S / RANGE: 35E / SECTION: 17 / LAT: 32.130438 / LONG: -103.394889 (TVD: 12583 feet, MD: 14923 feet)
 PPP: SWSW / 295 FSL / 1232 FWL / TWSP: 25S / RANGE: 35E / SECTION: 17 / LAT: 32.1239531 / LONG: -103.3941129 (TVD: 0 feet, MD: 0 feet)
 BHL: NWNW / 240 FNL / 988 FWL / TWSP: 25S / RANGE: 35E / SECTION: 17 / LAT: 32.1369958 / LONG: -103.3948878 (TVD: 12583 feet, MD: 1709 feet)

BLM Point of Contact

Name: Priscilla Perez Title: Legal Instruments Examiner Phone: 5752345934 Email: pperez@blm.gov

(Form 3160-3, page 3)

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

Approval Date: 02/26/2018

(Form 3160-3, page 4)

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



Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: Brian Wood		Signed on: 10/13/2017
Title: President		
Street Address: 37 Vera	no Loop	
City: Santa Fe	State: NM	Zip: 87508
Phone: (505)466-8120		
Email address: afmss@;	permitswest.com	
Field Represe	ntative	
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

FMSS

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT Application Data Report

APD ID: 10400023364
Operator Name: MATADOR PRODUCTION COMPANY
Well Name: LESLIE FED COM
Well Type: OIL WELL

Submission Date: 10/13/2017

Well Number: 215H

Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General		
APD ID: 10400023364	Tie to previous NOS?	Submission Date: 10/13/2017
BLM Office: CARLSBAD	User: Brian Wood	Title: President
Federal/Indian APD: FED	Is the first lease penetrate	ed for production Federal or Indian? FED
Lease number: NMNM136226	Lease Acres: 799.2	
Surface access agreement in place?	Allotted?	Reservation:
Agreement in place? NO	Federal or Indian agreem	ent:
Agreement number:		
Agreement name:		
Keep application confidential? NO		
Permitting Agent? YES	APD Operator: MATADOR	R PRODUCTION COMPANY
Operator letter of designation:		

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operator mile			
Operator Organization Name: MAT	ADOR PRODUC	TION COMPANY	
Operator Address: 5400 LBJ Freew	ay, Suite 1500	7 : 7504	0
Operator PO Box:		Zip: 7524	U
Operator City: Dallas	State: ⊤X		
Operator Phone: (972)371-5200			
Operator Internet Address: amonro	e@matadorreso	urces.com	
Section 2 - Well In	formation	· · · · · · · · · · · · · · · · · · ·	
Well in Master Development Plan?	NO	Mater Development Plan nam	e:
Well in Master SUPO? NO		Master SUPO name:	
Well in Master Drilling Plan? NO		Master Drilling Plan name:	
Well Name: LESLIE FED COM		Well Number: 215H	Well API Number:
Field/Pool or Exploratory? Field and	l Pool	Field Name: DOGIE DRAW	Pool Name: DELAWARE

Is the proposed well in an area containing other mineral resources? USEABLE WATER

. . .

SHL

Leg

#1

KOP

Leg

#1 PPP

Leg

#1

295

295

295

FSL 123

FSL 123

FSL

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Well Number: 215H

Descr	ibe o	ther	miner	als:														
ls the	prop	osed	well	in a H	elium	prod	uctio	n area?	N Use E	xisting W	ell Pac	!? NO	Ne	ew s	urface d	listurl	pance	?
Туре	of We	ell Pa	d: ML	JLTIPL	_E WE	ELL			Multip	ole Well P	ad Nan	ne:	Nu	umb	er: 21H			
Well C	Class	: HOF	RIZON	ITAL					LESLIE FED COM Number of Legs: 1									
Well V	Vork	Туре	: Drill															
Well T	уре:	OIL \	NELL															
Descr	ibe V	Vell T	ype:															
Well s	ub-T	ype:	INFIL	L														
Descr	ibe s	ub-ty	pe:															
Distar	nce to	o tow	n: 12	Miles			Dis	tance to	nearest v	vell: 30 FT	-	Dist	ance t	o le	ase line:	: 295 I	-1	
Reser	voir	well s	pacir	ng ass	signe	d acre	s Me	asureme	ent: 160 A	cres								
Well p	olat:	Le	slie_2	15H_I	Plat_2	20171	01312	2653.pd	f .									
Well w	vork	start	Date:	12/01	/2017	,			Durat	ion: 90 DA	AYS							
	Sec	tion	3 - V	Vell	Loca	atior	n Tal	ole										
Surve	у Тур	e: RE	ECTA	NGUL	AR.													
Descri	ibe S	urvey	/ Тур	e:														
Datum	n: NA	D83							Vertic	al Datum:		88						
Surve	y nur	nber:	1832	9														
	oot	ndicator	Foot	ndicator	0	Je	ion	lot/Lot/Tract	əpr	litude	lty	~	dian	Type	e Number	ation		
	NS-F	NS II	EV-I	EWI	Twsp	Ranç	Secti	Aliqu	Latitı	Long	Cour	State	Meric	ease	Leas	Elev	QM	DVT DVT

Well Name: LESLIE FED COM

Well Number: 215H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
PPP	264	FNL	988	FWL	25S	35E	17	Aliquot	32.13043	-	LEA	NEW	NEW	F	FEE .	-	149	125
Leg #1	0						1	SWN ⁻ W	8	103.3948 89		CO	CO			927 2	23	83
PPP Leg #1	132 0	FNL	988	FWL	25S	35E	17	Aliquot NWN W	32.13400 3	- 103.3948 89	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 125659	- 927 2	162 20	125 83
EXIT Leg #1	240	FNL	988	FWL	25S	35E	17	Aliquot NWN W	32.13699 58	- 103.3948 878	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 125659	- 927 2	173 09	125 83
BHL Leg #1	240	FNL	988	FWL	25S	35E	17	Aliquot NWN W	32.13699 58	- 103.3948 878	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 125659	- 927 2	173 09	125 83

- Power Company has to be willing to purchase gas back and if they are willing they require a 5 year commitment to supply the agreed upon amount of power back to them. With gas decline rates and unpredictability of markets it is impossible to agree to such long term demands. If the demands are not met then operator is burdened with penalty for not delivering.
- Compressed Natural Gas On lease
 - o Compressed Natural Gas is likely to be uneconomic to operate when the gas volume declines.
- NGL Removal On lease
 - NGL Removal requires a plant and is expensive on such a small scale rendering it uneconomic and still requires residue gas to be flared.

FMSS

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

Drilling Plan Data Report

Submission Date: 10/13/2017

APD ID: 10400023364

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: LESLIE FED COM

Well Number: 215H

reflects the most recent changes

Highlighted data

Show Final Text

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation	— .: .:	-	True Vertical	Measured			Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
1		3311	0	0	OTHER : Quaternary	USEABLE WATER	No
2	DEWEY LAKE	2922	389	389	SANDSTONE	USEABLE WATER	No
3	RUSTLER ANHYDRITE	2402	909	909		NONE	No
4	TOP SALT	1880	1431	1431		NONE	No
5	CASTILE	-413	3724	3724	ANHYDRITE	NONE	No
6	BASE OF SALT	-2140	5451	5451		NONE	No
7	BELL CANYON	-2163	5474	5474	SANDSTONE	NATURAL GAS,CO2,OIL	No
8	CHERRY CANYON	-3158	6469	6471	SANDSTONE	NATURAL GAS,CO2,OIL	No
9	BRUSHY CANYON	-4606	7917	7924	SANDSTONE	NATURAL GAS,CO2,OIL	No
10	BONE SPRING LIME	-5943	9254	9267		NATURAL GAS,CO2,OIL	No
11	BONE SPRING 1ST	-7012	10323	10337	OTHER : Carbonate	NATURAL GAS,CO2,OIL	No
12	BONE SPRING 1ST	-7086	10397	10411	SANDSTONE	NATURAL GAS,CO2,OIL	No
13	BONE SPRING 2ND	-7294	10605	10619	OTHER : Carbonate	NATURAL GAS,CO2,OIL	No
14	BONE SPRING 2ND	-7683	10994	11008	SANDSTONE	NATURAL GAS,CO2,OIL	No
15	BONE SPRING 3RD	-8145	11456	11460	OTHER : Carbonate	NATURAL GAS,CO2,OIL	No
16	BONE SPRING 3RD	-8800	12111	12126	SANDSTONE	NATURAL GAS,CO2,OIL	No
17	WOLFCAMP	-9132	12443	12522	OTHER : Carbonate	NATURAL GAS,CO2,OIL	Yes

Well Name: LESLIE FED COM

Well Number: 215H

Section 2 - Blowout Prevention

Pressure Rating (PSI): 10M

Rating Depth: 10000

Equipment: A BOP consisting of 3 rams with 2 pipe rams, 1 blind ram and one annular preventer. The BOP will be utilized below surface casing to TD. Also present will be an accumulator that meets the requirements of Onshore Order #2 for the pressure rating of the BOP stack. A rotating head will also be installed as needed. BOP will be inspected and operated as recommended in Onshore Order #2. A Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

Requesting Variance? YES

Variance request: Matador requests a variance to have the option of running a speed head for setting the intermediate 1 and 2 strings. If running a speed head with landing mandrel for 9.625" and 7" casing, then a minimum 3M BOPE system will be installed after surface casing is set. BOP test pressures will be 250 psi low and 3000 psi high. Annular will be tested to 250 psi low and 2500 psi high before drilling below the surface shoe. After 7" casing is set in the speed head, the BOP will then be lifted to install another casing head section for setting the production casing. Matador will nipple up the casing head and BOP and a minimum 10M BOPE system will be installed. Pressure tests will be made to 250 psi low and 10000 psi high. A diagram of the speed head is attached. Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

Testing Procedure: Pressure tests will be conducted before drilling out from under all casing strings. BOP will be inspected and operated as required by Onshore Order 2. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position. A third party company will test the BOPs. After setting the surface casing, and before drilling the surface casing shoe, a minimum 2M BOPE system will be installed. It will be tested to 250 psi low and 2000 psi high. Annular will be tested to 250 psi low and 1000 psi high. After setting intermediate 1 casing, a minimum 3M BOPE system will be installed and tested to 250 psi low and 3000 psi high. Annular will be installed and tested to 250 psi low and 3000 psi high. Annular will be tested to 250 psi low and 3000 psi high. After setting intermediate 2 casing, a 10M system will be installed and tested to 250 psi low and 10000 psi high with the annular being tested to 250 psi low and 5000 psi high. The 11" 10 M flange on the wellhead will also be tested to 10000 psi at this time.

Choke Diagram Attachment:

Leslie_215H_Choke_Revised_20171128115127.pdf

BOP Diagram Attachment:

Leslie_215H_BOP_20171013123507.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	1000	0	1000	3311		1000	J-55	54.5	OTHER - BTC	1.12 5	1.12 5	DRY	1.8	DRY	1.8
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	5600	0	5600	3311		5600	J-55	40	OTHER - BTC	1.12 5	1.12 5	DRY	1.8	DRY	1.8

Page 2 of 7

Well Name: LESLIE FED COM

Well Number: 215H

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
3	INTERMED IATE	8.75	7.0	NEW	API	N	0	12811	0	12563	3311		12811	P- 110	29	OTHER - BTC	1.12 5	1.12 5	DRY	1.8	DRY	1.8
4	PRODUCTI ON	6.12 5	4.5	NEW	API	N	0	17310	0	12583	3311		17310	P- 110	13.5	OTHER - BTC/TXP	1.12 5	1.12 5	DRY	1.8	DRY	1.8

Casing Attachments

Casing ID: 1

String Type:SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Leslie_215H_Casing_Design_Assumptions_20171013123700.pdf

Casing ID: 2 String Type: INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Leslie_215H_Casing_Design_Assumptions_20171013123728.pdf

Well Name: LESLIE FED COM

Well Number: 215H

Casing Attachments

Casing ID: 3 String Type:INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Leslie_215H_Casing_Design_Assumptions_20171013123802.pdf

Casing ID: 4 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Leslie_215H_Casing_Design_Assumptions_20171013123833.pdf

-									· ·· 7
	Se	ctio	on 4	- (Cen	ne	nt		
	-						•	-	

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1000	200	1.82	12.8	364	100	Class C	Bentonite + 2% CaCl + 3% NaCl + LCM
SURFACE	Tail		0	1000	700	1.38	14.8	966	100	Class C	5% NaCl + LCM
INTERMEDIATE	Lead		0	5600	1020	2.13	12.6	2172	100	Class C	Bentonite + 1% CaCl2 + 8% NaCl + LCM
INTERMEDIATE	Tail		. 0	.5600	540	1.38	14.8	745	100	Class C	5% NaCl + LCM
INTERMEDIATE	Lead		0	1281 1	560	2.36	11.5	1321	35	ТХІ	Fluid Loss + Dispersant + Retarder + LCM

Page 4 of 7

Well Name: LESLIE FED COM

Well Number: 215H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		0	1281 1	320	1.38	13.2	441	35	ТХІ	Fluid Loss + Dispersant + Retarder + LCM
PRODUCTION	Lead		0	1731 0	600	1.17	15.8	702	25	Class H	Fluid Loss + Dispersant + Retarder + LCM
PRODUCTION	Tail		0	1731 0	600	1.17	15.8	702	25	Class H	Fluid Loss + Dispersant + Retarder + LCM

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions.

Describe the mud monitoring system utilized: An electronic Pason mud monitoring system complying with Onshore Order 1 will be used.

Circúlating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (Ibs/gal)	Density (Ibs/cu ft)	Gel Strength (lbs/100 sqft)	НА	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1000	SPUD MUD	8.3	8.3							
1000	5600	SALT SATURATED	10	10							
5600	1281 1	OTHER : Fresh water & cut brine	9	9							
1281 1	1731 0	OIL-BASED MUD	12.5	12.5							

Well Name: LESLIE FED COM

Well Number: 215H

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

No electric logs are planned at this time. GR will be collected through the MWD tools from intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to TOC.

List of open and cased hole logs run in the well:

CBL,GR

Coring operation description for the well:

No core or drill stem test is planned.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 9000

Anticipated Surface Pressure: 6231.74

Anticipated Bottom Hole Temperature(F): 170

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Leslie_215H_H2S_Plan_20171013131409.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Leslie_215H_Horizontal_Drill_Plan_rdc_20171013131005.pdf

Other proposed operations facets description:

Deficiency letter dated 11/27/17 requested: 1) Revised Choke diagram and BOP testing - see Section 2 and revised Drill Plan;

Other proposed operations facets attachment:

Leslie_215H_Speedhead_Specs_20171013130618.pdf Leslie_215H_General_Drill_Plan_20171128115145.pdf

Other Variance attachment:









December 8, 2014

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		Midwes & Specia	st Hose alty, Inc.		
		Certificate of	f Conformity		
	Customer: PATTERSON B&I	E	Customer P.O.# 260	471	
S	ales Order # 236404		Date Assembled: 12/ 3	8/2014	
		Specifi	cations		
	Hose Assembly Type: C	hoke & Kill	· · · · · · · · · · · · · · · · · · ·		
	Assembly Serial # 2	87918-2	Hose Lot # and Dat	e Code 104	90-01/13
н	lose Working Pressure (psi) 1	0000	Test Pressure (p	osi) 150	00
We to t Sup Mic 331	e hereby certify that the above r the requirements of the purchas oplier: dwest Hose & Specialty, Inc. 12 S I-35 Service Rd	material supplied for se order and current	the referenced purcha industry standards.	ase order to be	true according
Ok. Cor	lahoma City, OK 73129 mments:	<u></u>		<u> </u>	
1	Approved By	Λ		Date 12/9/2014	

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2.



Internal Hydrostatic Test Certificate

General Infor	mation	Hose Specific	ations	
Customer	PATTERSON B&E	Hose Assembly Type	Choke & Kill	
MWH Sales Representative	AMY WHITE	Certification	ΑΡΙ 7Κ	
Date Assembled	12/8/2014	Hose Grade	MUD	
Location Assembled	ОКС	Hose Working Pressure	10000	
Sales Order #	236404	Hose Lot # and Date Code	10490-01/13	
Customer Purchase Order #	260471	HOSE I.D. (Inches)	3"	
Assembly Serial # (Pick Ticket #)	287918-1	HOSE O.D. (Inches)	5.30"	
Hose Assembly Length	20'	Armor (yes/no)	YES	
	Fitt	ings		
End A		End B		
Stem (Part and Revision #)	R3.0X64WB	Stem (Part and Revision #)	R3.0X64WB	
Stem (Heot #)	A141420	Stem (Heat #)	A141420	
Ferrule (Part and Revision #)	RF3.0	Ferrule (Part and Revision #)	RF3.0	
Ferrule (Heat #)	37DA5631	Ferrule (Heat #)	37DA5631	
Connection (Port #)	4 1/16 10K	Connection (Part #)	4 1/16 10K	
Connection (Hear #)	V3579	Connection (Heat #)	V3579	
Dies Used	5.37	Dies Used	5.3	
	Hydrostatic Tes	t Requirements		
Test Pressure (psi)	15,000	Hose assembly was tested w	with ambient water ire.	
	15 1/2	tomogratu		

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	Midwest Hose & Specialty, Inc.
Certif	icate of Conformity
Customer: PATTERSON B&E	Customer P.O.# 260471
Sales Order # 236404	Date Assembled: 12/8/2014
	Specifications
Hose Assembly Type: Choke & Ki	11
Assembly Serial # 287918-1	Hose Lot # and Date Code 10490-01/13
Hose Working Pressure (psi) 10000	Test Pressure (psi) 15000
We hereby certify that the above material su to the requirements of the purchase order an Supplier: Midwest Hose & Specialty, Inc. 3312 S I-35 Service Rd	וסף וופל for the referenced purchase order to be true according nd current industry standards.
Oklahoma City, OK 73129 Comments:	
Oklahoma City, OK 73129 Comments:	

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Internal Hydrostatic Test Graph

December 9, 2014

Customer: Patterson

Pick Ticket #: 284918



Comments: Hose assembly pressure tested with water at ambient temperature.

Approved By: Ryon Agams Tested By: Aler Hill

	Midu	rest Hose					
	& Spe	cialty, Inc.	,				
Inte	ernal Hydrost	atic Test Certificate					
General Info	rmation	Hose Specifi	cations				
Customer	PATTERSON B&E	Hose Assembly Type	Choke & Kill				
MWH Sales Representative	AMY WHITE	Certification	ΑΡΙ 7Κ				
Date Assembled	12/8/2014	Hose Grade	MUD				
Location Assembled	ОКС	Hose Working Pressure	10000				
Sales Order #	236404	Hose Lot # and Date Code	10490-01/13				
Customer Purchase Order #	260471	Hose I.D. (Inches)	3"				
Assembly Serial # (Pick Ticket #)	287918-3	Hose O.D. (inches)	5.23"				
Hose Assembly Length	70'.	Armor (yes/no)	YES				
•	Fit	tings					
End A	···	End B					
Stem (Part and Revision #)	R3.0X64WB	Stem (Part and Revision #)	R3.0X64WB				
Stem (Heol #)	A141420	Stem (Heat #)	A141420				
Ferrule (Port and Revision #)	RF3.0	Ferrule (Part and Revision #)	RF3.0				
Ferrule (Heat #)	37DA5631	Ferrule (Heat #)	37DA5631				
Connection (Part #)	4 1/16 10K	Connection (Part #)	4 1/16 10K				
Connection (Heat #)		Connection (Heat #)					
Dies Used	5.3	7 Dies Used	5.37				
	Hydrostatic Te	st Requirements					
Test Pressure (psi)	15,000	Hose assembly was tested	with ambient water				
Test Pressure Hold Time (minute	s) 16 3/4	16 3/4 temperat					
Test Pressure (psi) Test Pressure Hold Time (minute	15,000 s) 16 3/4	15,000Hose assembly was tested16 3/4temperatu					
Date Tested	Teste	ed By A	pproved By				

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	Midwest Hose & Specialty, Inc.
Certi	ficate of Conformity
Customer: PATTERSON B&E	Customer P.O.# 260471
Sales Order # 236404	Date Assembled: 12/8/2014
	Specifications
Hose Assembly Type: Choke & H	
Assembly Serial # 287918-3	Hose Lot # and Date Code 10490-01/13
Hose Working Pressure (psi) 10000	Test Pressure (psi) 15000
We hereby certify that the above material s to the requirements of the purchase order o Supplier: Midwest Hose & Specialty, Inc. 3312 S I-35 Service Rd Oklahoma City, OK 73129	supplied for the referenced purchase order to be true according and current industry standards.
Comments:	
Approved By	Date 12/9/2014

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Casing Design Criteria and Load Case Assumptions

Surface Casing

Collapse: DF_c=1.125

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.43 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.52 psi/ft).

Burst: DF_b=1.125

 Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.43 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: DF_t=1.8

• Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (8.3 ppg).

Intermediate #1 Casing

Collapse: DF_c=1.125

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.52 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: DF_b=1.125

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 50 bbl kick with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that (0.47 psi/ft). External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- Fracture at Shoe with 1/3 BHP at Surface: Internal burst force at the shoe will be Fracture Pressure at setting depth. Internal burst force at surface will be 1/3 of pore pressure at setting depth. External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft) which is a more conservative backup force than pore pressure.

Tensile: DF_t=1.8

• Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (10.0 ppg).

Intermediate #2 Casing

Collapse: DF_c=1.125

• Partial Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.47 psi/ft). The effects of axial load on collapse will be considered. Internal force equal to gas gradient over half of setting depth and mud gradient with which the next hole section will be run below that (0.65 psi/ft).

• Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.47 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: DF_b=1.125

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.
- Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 100 bbl kick with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that (0.65 psi/ft). External force will be equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.
- Fracture at Shoe with 1/3 BHP at Surface: Internal burst force at the shoe will be Fracture Pressure at setting depth. Internal burst force at surface will be 1/3 of pore pressure at setting depth. External force will be equal to the mud gradient in which the casing will be run (0.47 psi/ft) which is a more conservative backup force than pore pressure.

Tensile: DF_t=1.8

• Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (9.0 ppg).

Production Casing

Collapse: DF_c=1.125

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.65 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud
 gradient in which the casing will be run above that (0.65 psi/ft) and an internal force equal to mud gradient
 of displacement fluid (0.43 psi/ft).

Burst: DF_b=1.125

- Pressure Test: 8000 psi casing test with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.
- Injection Down Casing: 9500 psi surface injection pressure plus an internal pressure gradient of 0.65 psi/ft with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: DFt=1.8

• Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (12.5 ppg).

Casing Design Criteria and Load Case Assumptions

Surface Casing

Collapse: DF_c=1.125

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.43 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.52 psi/ft).

Burst: DF_b=1.125

 Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.43 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: DF_t=1.8

• Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (8.3 ppg).

Intermediate #1 Casing

Collapse: DF_c=1.125

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.52 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: DF_b=1.125

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 50 bbl kick with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that (0.47 psi/ft). External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- Fracture at Shoe with 1/3 BHP at Surface: Internal burst force at the shoe will be Fracture Pressure at setting depth. Internal burst force at surface will be 1/3 of pore pressure at setting depth. External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft) which is a more conservative backup force than pore pressure.

Tensile: DF_t=1.8

• Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (10.0 ppg).

Intermediate #2 Casing

Collapse: DF_c=1.125

Partial Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.47 psi/ft). The effects of axial load on collapse will be considered. Internal force equal to gas gradient over half of setting depth and mud gradient with which the next hole section will be run below that (0.65 psi/ft).

• Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.47 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: DF_b=1.125

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.
- Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 100 bbl kick with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that (0.65 psi/ft). External force will be equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.
- Fracture at Shoe with 1/3 BHP at Surface: Internal burst force at the shoe will be Fracture Pressure at setting depth. Internal burst force at surface will be 1/3 of pore pressure at setting depth. External force will be equal to the mud gradient in which the casing will be run (0.47 psi/ft) which is a more conservative backup force than pore pressure.

Tensile: DF_t=1.8

• Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (9.0 ppg).

Production Casing

Collapse: DF_c=1.125

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.65 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.65 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: DF_b=1.125

- Pressure Test: 8000 psi casing test with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.
- Injection Down Casing: 9500 psi surface injection pressure plus an internal pressure gradient of 0.65 psi/ft with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: DF_t=1.8

• Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (12.5 ppg).

Casing Design Criteria and Load Case Assumptions

Surface Casing

Collapse: DF_c=1.125

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.43 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.52 psi/ft).

Burst: DF_b=1.125

Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud
gradient in which the casing will be run (0.43 psi/ft), which is a more conservative backup force than pore
pressure.

Tensile: DF_t=1.8

• Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (8.3 ppg).

Intermediate #1 Casing

Collapse: DF_c=1.125

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.52 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: DF_b=1.125

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst
 pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 50 bbl kick
 with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that
 (0.47 psi/ft). External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft),
 which is a more conservative backup force than pore pressure.
- Fracture at Shoe with 1/3 BHP at Surface: Internal burst force at the shoe will be Fracture Pressure at setting depth. Internal burst force at surface will be 1/3 of pore pressure at setting depth. External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft) which is a more conservative backup force than pore pressure.

Tensile: DF_t=1.8

• Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (10.0 ppg).

Intermediate #2 Casing

Collapse: DF_c=1.125

• Partial Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.47 psi/ft). The effects of axial load on collapse will be considered. Internal force equal to gas gradient over half of setting depth and mud gradient with which the next hole section will be run below that (0.65 psi/ft).

• Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.47 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: DF_b=1.125

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.
- Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 100 bbl kick with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that (0.65 psi/ft). External force will be equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.
- Fracture at Shoe with 1/3 BHP at Surface: Internal burst force at the shoe will be Fracture Pressure at setting depth. Internal burst force at surface will be 1/3 of pore pressure at setting depth. External force will be equal to the mud gradient in which the casing will be run (0.47 psi/ft) which is a more conservative backup force than pore pressure.

Tensile: DFt=1.8

• Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (9.0 ppg).

Production Casing

Collapse: DF_c=1.125

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.65 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.65 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: DF_b=1.125

- Pressure Test: 8000 psi casing test with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.
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Tensile: DFt=1.8

• Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (12.5 ppg).

Casing Design Criteria and Load Case Assumptions

Surface Casing

Collapse: DF_c=1.125

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.43 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.52 psi/ft).

Burst: DF_b=1.125

• Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.43 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: DF_t=1.8

• Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (8.3 ppg).

Intermediate #1 Casing

Collapse: DF_c=1.125

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.52 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: DF_b=1.125

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 50 bbl kick with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that (0.47 psi/ft). External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
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Tensile: DF_t=1.8

• Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (10.0 ppg).

Intermediate #2 Casing

Collapse: DF_c=1.125

• Partial Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.47 psi/ft). The effects of axial load on collapse will be considered. Internal force equal to gas gradient over half of setting depth and mud gradient with which the next hole section will be run below that (0.65 psi/ft).



For the latest performance data, always visit our website: www.tenaris.com

December 31 2015



Connection: TenarisXP® BTC Casing/Tubing: CAS Coupling Option: REGULAR Size: 4.500 in. Wall: 0.290 in. Weight: 13.50 lbs/ft Grade: P110-ICY Min. Wall Thickness: 87.5 %

Nominal OD	4.500 in.	Nominal Weight	1 3.50 lbs/ft	Standard Drift Diameter	3.795 in.
Nominal ID	3.920 in.	Wall Thickness	0.290 in.	Special Drift Diameter	N/A
Plain End Weight	13.05 lbs/ft				
Body Yield Strength	479 x 1000 lbs	Internal Yield	14100 psi	SMYS	125000 psi
Collapse	11620 psi				
			<u> </u>		
Connection OD	5.000 in.	Coupling Length	9.075 in.	Connection ID	3.908 in.
Critical Section Area	3.836 sq. in.	Threads per in.	5.00	Make-Up Loss	4.016 in.
Tension Efficiency	100 %	Joint Yield Strength	479 x 1000 lbs	Internal Pressure Capacity ⁽¹⁾	14100 psi
Structural Compression Efficiency	100 %	Structural Compression Strength	479 x 1000 lbs	Structural Bending ⁽²⁾	127 °/100 f
External Pressure Capacity	11620 psi				
Minimum	6950 ft-lbs	Optimum	7720 ft-lbs	Maximum	8490 ft-lbs
	10500 ft-lbs	Yield Torque	12200 ft-lbs		<u> </u>

Well Name: LESLIE FED COM

Well Number: 215H

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: Caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: Grader

Access other construction information: Four surface poly pipelines on the north side of the caliche road will be padded or otherwise protected. Access miscellaneous information:

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: CULVERT

Drainage Control comments: Crowned and ditched; 18" x 50' culvert will be installed on the north side of the caliche road.

Road Drainage Control Structures (DCS) description: None

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Leslie_215H_Well_Map_20171013131035.pdf

Existing Wells description:

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description:

Production Facilities map:

Leslie_215H_Production_Diagram_20171013131049.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

-

Well Name: LESLIE FED COM

Well Number: 215H

Water source use type: DUST CON INTERMEDIATE/PRODUCTION CAS	Water source type: GW WELL			
Describe type:	Describe type:			
Source latitude:				
Source datum:				
Water source permit type: PRIVAT	E CONTRACT			
Source land ownership: PRIVATE				
Water source transport method: T	RUCKING			
Source transportation land owners	ship: FEDERAL			
Water source volume (barrels): 150	000	Source volume (acre-feet): 1.9333965		
Source volume (gal): 630000				
Water source and transportation map):			
Leslie_215H_Water_Source_Map_2017	'1013131107.pdf			
Water source comments:				
New water well? NO				
	аны (1997) А			
New Water Well Ir	110			
Well latitude:	Well Longitude:	Well datum:		
Well target aquifer:				
Est. depth to top of aquifer(ft):	Est thickness of a	aquifer:		
Aquifer comments:				
Aquifer documentation:				
Well depth (ft):	Well casing type:			
Well casing outside diameter (in.):	Well casing inside c	Jiameter (in.):		
New water well casing?	Used casing source	::		
Drilling method:	Drill material:			
Grout material:	Grout depth:			
Casing length (ft.):	Casing top depth (fl	t.):		
Well Production type:	Completion Method	:		
Water well additional information:				
State appropriation permit:				
Additional information attachment:				

Well Name: LESLIE FED COM

Well Number: 215H

Section 6 - Construction Materials

Construction Materials description: NM One Call (811) will be notified before construction starts. Top 6" of soil and brush will be stockpiled west of the pad. Closed loop drilling system will be used. Caliche will be hauled from existing caliche pits on private land (Destiny pit in NENE 4-25s-35e & Madera pit in SENW 6-25s-35e). **Construction Materials source location attachment:**

Leslie 215H Water Source Map_20171013131137.pdf

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Cuttings, mud, salts, and other chemicals

Amount of waste: 2000 barrels

Waste disposal frequency : Daily

Safe containment description: Steel tanks

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: PRIVATE FACILITY

Disposal type description:

Disposal location description: R360's state approved (NM-01-0006) disposal site at Halfway, NM

	Reserve Pit	
Reserve Pit being used? N	0	
Temporary disposal of pro	duced water into reserve pi	t?
Reserve pit length (ft.)	Reserve pit width (ft.)	
Reserve pit depth (ft.)		Reserve pit volume (cu. yd.)
Is at least 50% of the reser	ve pit in cut?	
Reserve pit liner		
Reserve pit liner specificat	ions and installation descri	ption
	Cuttings Area	
Cuttings Area being used?	NO	· · · · · · · · · · · · · · · · · · ·
Are you storing cuttings or	n location? YES	
Description of cuttings loc	ation Steel tanks on pad	
Cuttings area length (ft.)		
J J (<i>()</i>		Cuttings area width (ft.)

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Well Name: LESLIE FED COM

Well Number: 215H

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Leslie_215H_Well_Site_Layout_20171013131204.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: LESLIE FED COM

Multiple Well Pad Number: 21H

Recontouring attachment:

Leslie_215H_Recontour_Plat_20171013131218.pdf Leslie_215H_Interim_Reclamation_Diagram_20180205104526.pdf Drainage/Erosion control construction: Crowned and ditched

Drainage/Erosion control reclamation: Harrowed on the contour

Well pad proposed disturbance (acres): 3.21	Well pad interim reclamation (acres): 1.57	Well pad long term disturbance (acres): 1.64
Road proposed disturbance (acres): 0 16	Road interim reclamation (acres): 0.16	Road long term disturbance (acres): 0.16
Powerline proposed disturbance (acres): 0	Powerline interim reclamation (acres): 0 Bineline interim reclamation (acres): 0	Powerline long term disturbance (acres): 0
Pipeline proposed disturbance (acres): 0	Other interim reclamation (acres): 0	Pipeline long term disturbance (acres): 0
Other proposed disturbance (acres): 0	Total interim reclamation: 1.73	Other long term disturbance (acres): 0
Total proposed disturbance: 3.37		Total long term disturbance: 1.8

Reconstruction method: Interim reclamation will be completed within 6 months of completing the last well on the pad. Interim reclamation will consist of shrinking the pad 49% (1.57 acre) by removing caliche and reclaiming 65' area on the north and 150' on the west sides of the pad. This will leave 1.64 acres for the production equipment (e. g., tank battery,

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Well Name: LESLIE FED COM

Well Number: 215H

heater-treaters, separator), pump jacks, and tractor-trailer turn around. Disturbed areas will be contoured to match preconstruction grades. Soil and brush will be evenly spread over disturbed areas and harrowed on the contour. Disturbed areas will be seeded in accordance with BLM's requirements.

Seed source:

Source address:

Topsoil redistribution: Enough stockpiled topsoil will be retained to cover the remainder of the pad when the last well is plugged. Once the last well is plugged, then the rest of the pad will be similarly reclaimed within 6 months of plugging. Noxious weeds will be controlled.

Soil treatment: None

Existing Vegetation at the well pad:

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road:

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline:

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances:

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table Seed type: Seed name: Source name: Source phone: Seed cultivar:

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Well Name: LESLIE FED COM

Well Number: 215H

Seed use location:

PLS pounds per acre:

Proposed seeding season:

Total pounds/Acre:

	Seed	Sum	m	ary		,		-
Seed	Туре	.!_	Po	oun	ds/	Acr	е	

Seed reclamation attachment:

.

Operator Contact/Responsible Official Contact Info

First Name:

Last Name:

Phone:

Email:

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: To BLM standards

Weed treatment plan attachment:

Monitoring plan description: To BLM standards

Monitoring plan attachment:

Success standards: To BLM satisfaction

Pit closure description: No pit

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: NEW ACCESS ROAD Describe: Surface Owner: BUREAU OF LAND MANAGEMENT Other surface owner description: BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office:

Well Name: LESLIE FED COM

Well Number: 215H

NPS Local Office:	
State Local Office:	
Military Local Office:	
USFWS Local Office:	
Other Local Office:	
USFS Region:	
USFS Forest/Grassland:	USFS Ranger District:

Disturbance type: WELL PAD
Describe:
Surface Owner: BUREAU OF LAND MANAGEMENT
Other surface owner description:
BIA Local Office:
BOR Local Office:
COE Local Office:
DOD Local Office:
NPS Local Office:
State Local Office:
Military Local Office:
USFWS Local Office:
Other Local Office:
USFS Region:
USFS Forest/Grassland:

USFS Ranger District:

Disturbance type: EXISTING ACCESS ROAD Describe: Surface Owner: BUREAU OF LAND MANAGEMENT Other surface owner description: BIA Local Office:

Well Name: LESLIE FED COM

Well Number: 215H

BOR Local Office:	
COE Local Office:	
DOD Local Office:	
NPS Local Office:	
State Local Office:	
Military Local Office:	
USFWS Local Office:	
Other Local Office:	
USFS Region:	
USFS Forest/Grassland:	USFS Ranger District:

Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

ROW Applications

SUPO Additional Information: Deficiency letter dated 11/27/17 requested: 1) Revised interim reclamation based on discussion at onsite - see revised interim reclamation diagram; 2) Surface Use Agreement - Surface use ownership is BLM Use a previously conducted onsite? YES

Previous Onsite information: On site inspection was held with Vance Wolf on October 27, 2016. Lone Mountain inspected and filed archaeology report NMCRIS 138869 on August 31, 2017.

Other SUPO Attachment

Leslie_215H_General_SUPO_20180205104405.pdf



TAFMSS

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Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO Produced Water Disposal (PWD) Location: PWD surface owner: Lined pit PWD on or off channel: Lined pit PWD discharge volume (bbl/day): Lined pit specifications: Pit liner description: Pit liner manufacturers information: Precipitated solids disposal: Decribe precipitated solids disposal: Precipitated solids disposal permit: Lined pit precipitated solids disposal schedule: Lined pit precipitated solids disposal schedule attachment: Lined pit reclamation description: Lined pit reclamation attachment: Leak detection system description: Leak detection system attachment: Lined pit Monitor description: Lined pit Monitor attachment: Lined pit: do you have a reclamation bond for the pit? Is the reclamation bond a rider under the BLM bond? Lined pit bond number: Lined pit bond amount: Additional bond information attachment:

PWD disturbance (acres):

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

PWD disturbance (acres):

PWD disturbance (acres):

Injection well type: Injection well number: Assigned injection well API number? Injection well new surface disturbance (acres): Minerals protection information: Mineral protection attachment: Underground Injection Control (UIC) Permit? UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location: PWD surface owner: Surface discharge PWD discharge volume (bbl/day): Surface Discharge NPDES Permit? Surface Discharge NPDES Permit attachment: Surface Discharge site facilities information: Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location: PWD surface owner: Other PWD discharge volume (bbl/day): Other PWD type description: Other PWD type attachment: Have other regulatory requirements been met? Other regulatory requirements attachment: Injection well name:

Injection well API number:

PWD disturbance (acres):

PWD disturbance (acres):

FMSS

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Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB001079

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Bond Info Data Report

and the second

02/27/2018

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:



ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1983, U.S. SURVEY FEET.

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