PO Box 5270 Hobibs NM 88240      Location of Well (Report location clearly and in accordance with any 1     At surface SWSW / 200 FSL / 786 FWL / LAT 32.2833979     At proposed prod. zone NWNW / 330 FNL / 380 FWL / LAT 3      Hostance in miles and direction from nearest town or post office*     20 miles      Isstance from proposed*     Isotenin to return to the set of the set o	Single Zone Multiple Zo 7 44 6. Photoe No. (include area code) (575)393-5905 State requirements.*) 0/LONG -103.4652549	OMB N Expires 0 Scase Serial No. North M132073 If Indian, Allotee 7 If Unit or CA Agree 8. Lease Name and V	ernent, Name and No. Nell No. 321630 D FED COM 2H - 4494 Exploratory (2209)
(March 2012) UNITED STATES DEPARTMENT OF THE IN BUREAU OF LAND MANA APPLICATION FOR PERMIT TO D  1a. Type of work: DRILL IB. Type of Well: DRILL IB. Type of Well: Oil Well Gas Well Other 2. Name of Operator MEWBOURNE OIL COMPANY (147 3a. Address PO Box 5270 Hobits NM 88240 4. Location of Well (Report location clearly and in accordance with any 1 At surface SWSW / 200 FSL / 786 FWL / LAT 32.2833979 At proposed prod. zone NWNW / 330 FNL / 380 FWL / LAT 3  14. Distance in miles and direction from nearest town of post office* 20 miles 15. Distance from proposed* location to nearest 185 feet property or lease line, ft.	Single Zone Multiple Zo 7 44 6. Photoe No. (include area code) (575)393-5905 State requirements.*) 0/LONG -103.4652549	2 If Unit or CA Agree 8. Lease Name and V me GAZELLE 22 B2MI 9. API Well No. 30-025- 10. Field and Pool, or E ANTELOPE RIDGE 11. Sec., T. R. M. or BI	a. 1004-0137 ktober 31, 2014 or Tribe Name ement, Name and No. Well No. O FED COM 2H 
UNITED STATES DEPARTMENT OF THE IN BUREAU OF LAND MANA APPLICATION FOR PERMIT TO D	Single Zone Multiple Zo 7 44 6. Photoe No. (include area code) (575)393-5905 State requirements.*) 0/LONG -103.4652549	2 If Unit or CA Agree 8. Lease Name and V me GAZELLE 22 B2MI 9. API Well No. 30-025- 10. Field and Pool, or E ANTELOPE RIDGE 11. Sec., T. R. M. or BI	ernent; Name and No. Well No. (321630) D FED COM 2H (Exploratory (2209)
DEPARTMENT OF THE IN BUREAU OF LAND MANA APPLICATION FOR PERMIT TO D	Single Zone Multiple Zo 7 44 6. Photoe No. (include area code) (575)393-5905 State requirements.*) 0/LONG -103.4652549	2 If Unit or CA Agree 8. Lease Name and V me GAZELLE 22 B2MI 9. API Well No. 30-025- 10. Field and Pool, or E ANTELOPE RIDGE 11. Sec., T. R. M. or BI	ernent, Name and No. Nell No. 321630 D FED COM 2H - 4494 Exploratory (2209)
Ia. Type of work:       DRILL       REENTER         Ib. Type of Well:       Oil Well       Gas Well       Other         2. Name of Operator       MEWBOURNE OIL COMPANY       (14'7')         3a. Address       PO Box 5270 Hobbs NM 88240       36')         4. Location of Well (Report location clearly and in accordance with any 1')       At surface       SWSW / 200 FSL / 786 FWL / LAT 32.2833979         At surface       SWSW / 200 FSL / 786 FWL / LAT 32.2833979       At proposed prod. zone       NWNW / 330 FNL / 380 FWL / LAT 3         14. Distance in miles and direction from nearest town or post office*       20 miles       185 feet       185 feet         15. Distance from proposed*       185 feet       185 feet       185 feet	Single Zone Multiple Zo 7 44 6. Photoe No. (include area code) (575)393-5905 State requirements.*) 0/LONG -103.4652549	2 If Unit or CA Agree 8. Lease Name and V me GAZELLE 22 B2MI 9. API Well No. 30-025- 10. Field and Pool, or E ANTELOPE RIDGE 11. Sec., T. R. M. or BI	ernent, Name and No. Nell No. 321630 D FED COM 2H - 4494 Exploratory (2209)
Ib. Type of Well:       Oil Well       Gas Well       Other         2. Name of Operator       MEWBOURNE OIL COMPANY       ////7         3a. Address       PO Box 5270 Hobbs NM 88240       R         4. Location of Well (Report location clearly and in accordance with any 1 At surface SWSW / 200 FSL / 786 FWL / LAT 32.2833979 At proposed prod. zone NWNW / 330 FNL / 380 FWL / LAT 3         14. Distance in miles and direction from nearest town of post office* 20 miles         15. Distance from proposed* location to nearest property or lease line, ft.	Single Zone Multiple Zo (HH) h Phone No. (include area code) (575)393-5905 State requirements: ") (LONG -103.4652549	-8. Lease Name and V GAZELLE 22 B2M( 9. API Well No. 30-025- 10. Field and Pool, or F ANTELOPE RIDGE 11. Sec., T. R. M. or Bi	Well No. (321630) D FED COM 2H 
Ib. Type of Well:       Oil Well       Gas Well       Other         2. Name of Operator       MEWBOURNE OIL COMPANY       ////7         3a. Address       PO Box 5270 Hobbs NM 88240       R         4. Location of Well (Report location clearly and in accordance with any 1 At surface SWSW / 200 FSL / 786 FWL / LAT 32.2833979 At proposed prod. zone NWNW / 330 FNL / 380 FWL / LAT 3         14. Distance in miles and direction from nearest town of post office* 20 miles         15. Distance from proposed* location to nearest property or lease line, ft.	Single Zone Multiple Zo (HH) h. Phone No. (include area code) (575)393-5905 State requirements: ") (LONG -103.4652549	me GAZELLE 22 B2MI 9. API Well No. <u>30-025</u> 10. Freld and Pool, or E ANTELOPE RIDGE 11. Sec., T. R. M. or BI	D FED COM 2H 4494 Exploratory (2209)
Name of Operator     MEWBOURNE CIL COMPANY     MEWBOURNE CIL COMPANY     PO Box 5270 Hobibs NM 88240     At contain of Well (Report location clearly and in accordance with any 1     At surface SWSW / 200 FSL / 786 FWL / LAT 32.2833979     At proposed prod. zone NWNW / 330 FNL / 380 FWL / LAT 3     Distance in miles and direction from nearest town or post office*     20 miles     Distance from proposed*     location to nearest 185 feet     property or lease line, ft.	7 444) h. Photoc No. (include area code) (575)383-5905 State requirements:*) h/LONG -103.4652549	9. API Well Na. <u>30-025</u> 10. Field and Pool, or F ANTELOPE RIDGE 11. Scc., T. R. M. or Bl	4494 Exploratory (2209)
PO Box 5270 Hobbs NM 88240 4 Location of Well (Report location clearly and in accordance with any 1 At surface SWSW / 200 FSL / 786 FWL / LAT 32.2833979 At proposed prod. zone NWNW / 330 FNL / 380 FWL / LAT 3 14. Distance in miles and direction from nearest town or post office* 20 miles 15. Distance from proposed* location to nearest 185 feet property or lease line, ft.	575)393-5905 Bate requirements *) / LONG -103.4652549	10. Field and Posl, or F ANTELOPE RIDGE 11. Sec., T. R. M. or Bi	Exploratory (2209)
At surface SWSW / 200 FSL / 786 FWL / LAT 32.2833979 At proposed prod. zone NWNW / 330 FNL / 380 FWL / LAT 3 14. Distance in miles and direction from nearest town or post office* 20 miles 15. Distance from proposed* location to nearest 185 feet property or lease line, ft.	/LONG -103.4652549		
At proposed prod. zone NWNW / 330 FNL / 380 FWL / LAT 3 14. Distance in miles and direction from nearest town or post office* 20 miles 15. Distance from proposed* location to nearest 185 feet property or lease line, ft.	( ·····	SEC 22 / T235 / R3	k and Survey or Area
20 miles 15 Distance from proposed* location to nearest 185 feet property or lease lime, fi.	<u>````````````````````````````````</u>	man i V	14E / NMP
location to nearest 185 feet property or lease line, fi.		12. County or Parish LEA	13. State NM
ANNO CONCATCHE OF DE LITHE DIE E HOW D	16. No. of acres in lease         17. 3           320         160	Spacing Unit dedicated to this w D	rell
18. Distance from proposed location* to nearest well, drilling, completed, 150 feet		BLMBIA Bond Na on file D: NM1693	
	2. Approximate date work will start* 07/23/2018	23. Estimated duration 60 days	I
	24. Attachments		
The following, completed in accordance with the requirements of Onshore	Oil and Gas Order No.1, must be attached	d to this form	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> </ol>	Item 20 above).	terations unless covered by an e	existing bond on file (see
<ol> <li>A Surface Use Plan (if the location is on National Forest System La SUPO must be filed with the appropriate Forest Service Office).</li> </ol>	nds, the 5. Operator certification 6. Such other site specifi BLM.	fic information and/or plans as	may be required by the
25. Signature (Electronic Submission)	Name (Printed/Typed) Bradley Bishop / Ph: (575)39		Date 04/24/2018
Title Regulatory			
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Christopher Walls / Ph: (575)2		Date 06/29/2018
Fitle Petroleum Engineer	Office CARLSBAD		
Application approval does not warrant or certify that the applicant holds l conduct operations thereon. Conditions of approval, if any, are attached.	egal or equitable title to those rights in the	he subject lease which would en	nitle the applicant to
File 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crim States any false, fictitious or fraudulent statements or representations as to a	e for any person knowingly and willful	ly to make to any department or	r agency of the United
(Continued on page 2) GCP Rec 07/02/18			

ITIONS APPROVED WITH CON

KE 118

Approval Date: 06/29/2018

#### **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)

#### **Additional Operator Remarks**

#### Location of Well

1. SHL: SWSW / 200 FSL / 786 FWL / TWSP: 23S / RANGE: 34E / SECTION: 22 / LAT: 32.2833979 / LONG: -103.4652549 (TVD: 27 feet, MD: 27 feet) PPP: SWNW / 2640 FNL / 380 FWL / TWSP: 23S / RANGE: 34E / SECTION: 22 / LAT: 32.2901119 / LONG: -103.4652471 (TVD: 10430 feet, MD: 12865 feet) PPP: SWSW / 330 FSL / 380 FWL / TWSP: 23S / RANGE: 34E / SECTION: 22 / LAT: 32.2837622 / LONG: -103.465241 (TVD: 10397 feet, MD: 10552 feet) BHL: NWNW / 330 FNL / 380 FWL / TWSP: 23S / RANGE: 34E / SECTION: 22 / LAT: 32.2964615 / LONG: -103.465241 (TVD: 10438 feet, MD: 15175 feet)

## **BLM Point of Contact**

Name: Judith Yeager Title: Legal Instruments Examiner Phone: 5752345936 Email: jyeager@blm.gov

#### **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.



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: Bradley Bishop		Signed on: 04/24/2018
Title: Regulatory		
Street Address: PO Box 5270		
City: Hobbs	State: NM	<b>Zip: 88240</b>
Phone: (575)393-5905		
Email address: bbishop@mewbou	ime.com	
Field Representative	1	
Representative Name:		
Street Address:		
City:	State:	Zīp:
Phone:		
Email address:		



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT Application Data Report 07/02/2018

APD ID: 10400029580

**Operator Name: MEWBOURNE OIL COMPANY** 

Well Name: GAZELLE 22 B2MD FED COM

Well Type: OIL WELL

Submission Date: 04/24/2018

Zip: 88240

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Well Work Type: Drill

Well Number: 2H

Show Final Text

Section 1 - Genera	1	
APD ID: 10400029580	Tie to previous NOS?	Submission Date: 04/24/2018
BLM Office: CARLSBAD	User: Bradley Bishop	Title: Regulatory
Federal/Indian APD: FED	Is the first lease penetrated	for production Federal or Indian? FED
Lease number: NMNM132073	Lease Acres: 320	
Surface access agreement in place	? Allotted? R	eservation:
Agreement in place? NO	Federal or Indian agreement	E
Agreement number:		
Agreement name:		
Keep application confidential? YES	5	
Permitting Agent? NO	APD Operator: MEWBOURN	E OIL COMPANY
Operator letter of designation:	Gazelle22B2MDFedCom1H operatorle	tterofdesig 20180524145522.pdf

**Operator Info** 

**Operator Organization Name: MEWBOURNE OIL COMPANY** 

Operator Address: PO Box 5270

**Operator PO Box:** 

State: NM **Operator City:** Hobbs

**Operator Phone: (575)393-5905** 

**Operator Internet Address:** 

#### **Section 2 - Well Information**

Well in Master Development Plan? NO	Mater Development Plan name:	
Well in Master SUPO? NO	Master SUPO name:	
Well in Master Drilling Plan? NO	Master Drilling Plan name:	
Well Name: GAZELLE 22 B2MD FED COM	Well Number: 2H	Well API Number:
Field/Pool or Exploratory? Field and Pool	Field Name: ANTELOPE RIDGE	Pool Name: BONE SPRIING

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

Well Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

Desc	ribe o	ther	miner	als:														
ls the	e prop	osed	<b>well</b> i	in a H	elium	prod	uctio	n area?	N Use E	Existing W	lell Pa	<b>d? NO</b>	No	ew s	surface (	listur	bance	:?
Туре	of We	ell Pa	d: SIN	GLE	WELL	•			Multij	ple Well P	ad Na	ne:	N	uml	ber:			
We[]	Class	: Hof	RIZON	ITAL					Numt	per of Leg	<b>s</b> :							
Well	Work	Туре	: Drill															
Well	Type:	OIL V	WELL															
Desc	ribe V	<b>Vell T</b>	ype:															
Well	sub-T	ype: /	APPR	aisai	-													
Desc	ribe s	ub-ty	pe:															
Dista	nce to	o town	n: 20	Miles			Dis	tance to	nearest v	<b>vell</b> : 150 F	т	Dist	ance t	o le	ase line	: 185	FT	
Rese	rvoir	weil s	pacin	g ass	ignec	l acre	s Me	asurema	ent: 160 A	cres								
Well	plat:	Ga	zelle2	2B2N	IDFed	Com1	H_W	ELLPLA	T_201805	24145901	.pdf							
Well	work	start	Date:	07/23	/2018				Durat	<b>ion:</b> 60 D/	AYS							
									7									
	Sec	tion	3 - V	Vell	Loca	atior	n Tal	ble										
Surve	еу Тур	e: RE	ECTA	NGUL	AR													
Desc	ribe S	urvey	/ Туре															
Datu	m: NA	D83							Vertic	al Datum:	NAVE	88						
Surve	ey nur	nber:																
	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	QW	۵۷T
SHL	800	FSL	7616	FWL	235	34E	22	Aliquot	92248339	e Nota Notes	LEA	NEW		F	NMNM	349	27	27
Leg #1								SWS W		108.4350 1899		MEXI CO	CO		132073	2		
КОР	<u>i</u> do	FSL	ti	FWL	235	34E	22	Aliquot	\$1.4.14.19	2	LEA		NEW	F	NMNM	-	996	994
Leg #1								sws w		11011.4562 1102		MEXI CO	MEXI CO		132073	645 4	0	6
PPP Leg	2000 	FSL		FWL	235	34E	22	Aliquot SWS	12.2,3375 12		LEA	MEXI		F	NMNM 132073		105 52	103 97
#1								W	ا ا ا	ýj		со	со			5		

### Well Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	QW	TVD
PPP	230	FNL	II	FWL	23S	34E	22	Aliquot	S12.20000		LEA	NEW	NEW	S	STATE	-	128	104
Leg #1	憅							SWN W	19) 	10341652 1971		MEXI CO	MEXI CO		- - - 	693 8	65	30
EXIT	<u>(1990)</u>	FNL	SED	FWL	23S	34E	22	Aliquot	12,20,415		LEA			s	STATE	-	151	104
Leg #1			i.					NWN W		1014052 SA		MEXI CO	MEXI CO			694 6	75	38
BHL	and a	FNL	SED.	FWL	235	34E	22	Aliquot	82.220335	14	LEA	NEW	NEW	s	STATE	-	151	104
Leg #1			*					NWN W	15	1108,4852 Sta		MEXI CO	MEXI Co		:	694 6	75	38

## United States Department of the Interior Bureau of Land Management Carlsbad Field Office 620 E Greene Street Carlsbad, New Mexico 88201-1287

#### **Statement Accepting Responsibility for Operations**

Operator Name:	Mewbourne Oil Company
Street or Box:	P.O. Box 5270
City, State:	Hobbs, New Mexico
Zip Code:	88241

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted of the leased land or portion thereof, as described below.

Lease Number:	NMNM - 132073
Legal Description of Land:	Section 22, T-23S, R-34E Lea County, New Mexico. Location @ 168' FSL & 786' FWL, Sec. 22 T23S R34E.
Formation (if applicable):	Bone Spring
Bond Coverage:	\$150,000
BLM Bond File:	NM1693 Nationwide, NMB - 000919

Authorized Signature:

Enably C Birly

Name: Bradley Bishop Title: Regulatory Manager Date: 05-24-2018.

# **FMSS**

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

07/02/2018

APD ID: 10400029580

**Operator Name: MEWBOURNE OIL COMPANY** 

Submission Date: 04/24/2018

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Show Final Text

Well Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

Well Type: OIL WELL

Well Work Type: Drill

# Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	UNKNOWN	3492	27	27		NONE	No
2	RUSTLER	2522	970	970	DOLOMITE, ANHYDRIT E	USEABLE WATER	No
3	TOP SALT	1457	2035	2035	SALT	NONE	No
4	BOTTOM SALT	-833	4325	4325	SALT	NONE	No
5	LAMAR	-1583	5075	5075	LIMESTONE	NATURAL GAS, OIL	No
6	BELL CANYON	-1608	5100	5100	SANDSTONE	NATURAL GAS, OIL	No
7	CHERRY CANYON	-2353	5845	5845	SHALE, SANDSTONE	NATURAL GAS, OIL	No
8	BRUSHY CANYON	-3778	7270	7270	SANDSTONE	NATURAL GAS, OIL	No
9	BONE SPRING	-5083	8575	8575	SANDSTONE	NATURAL GAS, OIL	No
10	BONE SPRING 1ST	-6158	9650	9650	SANDSTONE	NATURAL GAS, OIL	No
11	BONE SPRING 2ND         -6683         10175         10175         SANDSTONE		SANDSTONE	NATURAL GAS, OIL	Yes		

# **Section 2 - Blowout Prevention**

Pressure Rating (PSI): 5M

Rating Depth: 15175

Equipment: Annular, Pipe Ram, Blind Ram

Requesting Variance? YES

**Variance request:** A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. Anchors are not required by the manufacturer. A multi-bowl wellhead is being used. See attached schematic.

**Testing Procedure:** BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly

Well Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

#### **Choke Diagram Attachment:**

Gazelle\_22\_B2MD\_Fed\_Com\_2H\_5M\_BOPE\_Choke\_Diagram\_20180420165905.pdf

Gazelle\_22\_B2MD\_Fed\_Com\_2H\_Flex\_Line\_Specs\_20180420165906.pdf

#### **BOP Diagram Attachment:**

Gazelle\_22\_B2MD\_Fed\_Com\_2H\_5M\_BOPE\_Schematic\_20180420165922.pdf

Gazelle\_22\_B2MD\_Fed\_Com\_2H\_Mutti\_Bowl\_WH\_20180420165923.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	Jaint 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	1045	0	1045			1045	H-40	48	STC	1.42	3.18	DRY	6.42	DRY	10.7 9
2	INTERMED IATE	12.2 5	9.625	NEW	API	Y	0	5000	0	5000			5000	J-55	36	LTC	1.13	1.96	DRY	2.43	DRY	4.54
3	PRODUCTI ON	8.75	7.0	NEW	API	N	0	10716	0	10423			10716	P- 110	26	LTC	1.5	1.92	DRY	2.32	DRY	2.98
4	LINER	6.12 5	4.5	NEW	API	N	9967	15182	9960	10438			5215	P- 110	13.5	ltc	1.97	2.29	DRY	4.8	DRY	5.99

#### **Casing Attachments**

Casing ID: 1 String Type: SURFACE

Inspection Document:

**Spec Document:** 

**Tapered String Spec:** 

#### Casing Design Assumptions and Worksheet(s):

Gazelle\_22\_B2MD\_Fed\_Com\_2H\_Csg\_Assumptions\_20180420170456.pdf

Well Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

#### **Casing Attachments**

Casing ID: 2 String Type: INTERMEDIATE

Inspection Document:

#### Spec Document:

#### **Tapered String Spec:**

Gazelle\_22\_B2MD\_Fed\_Com\_2H\_TaperedCsg\_20180420170347.pdf

#### **Casing Design Assumptions and Worksheet(s):**

Gazelle\_22\_B2MD\_Fed\_Com\_2H\_Csg\_Assumptions\_20180420170503.pdf

Casing ID: 3 String Type: PRODUCTION

Inspection Document:

Spec Document:

**Tapered String Spec:** 

#### Casing Design Assumptions and Worksheet(s):

Gazelle\_22\_B2MD\_Fed\_Com\_2H\_Csg\_Assumptions\_20180524142815.pdf

Casing ID: 4 String Type:LINER

Inspection Document:

Spec Document:

**Tapered String Spec:** 

#### Casing Design Assumptions and Worksheet(s):

Gazelle\_22\_B2MD\_Fed\_Com\_2H\_Csg\_Assumptions\_20180524142910.pdf

**Section 4 - Cement** 

#### Well Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	ou Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	852	560	2.12	12.5	1187	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		852	1045	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	4253	840	2.12	12.5	1781	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		4253	5000	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	-	4800	8054	305	2.12	12.5	647	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail	1	8054	1071 6	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		9967	1518 2	215	2.97	11.2	639	25	Class C	Satt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-Settling Agent

## 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: Lost circulation material Sweeps Mud scavengers in surface hole

Describe the mud monitoring system utilized: Visual Monitoring

 	Circ	ulating Medi	um T	able							
Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (Ibs/gal)	Density (Ibs/cu ft)	Gel Strength (Ibs/100 sqft)	Hd	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics

#### Well Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

Top Depth	Bottom Depth	Mud Type	Min Weight (Iba/gal)	Max Weight (Iba/gal)	Density (Ibs/cu ft)	Gel Strength (Ibs/100 aqft)	На	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1045	5000	SALT SATURATED	10	10							
5000	9946	WATER-BASED MUD	8.6	9.7							
0	1045	SPUD MUD	8.6	8.8		• • • •					
9946	1043 8	WATER-BASED MUD	9.5	10							

#### Section 6 - Test, Logging, Coring

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

Will run GR/CNL from KOP (9967') to surface

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

CNL,DS,GR,MWD,MUDLOG

Coring operation description for the well:

None

# **Section 7 - Pressure**

**Anticipated Bottom Hole Pressure: 5428** 

Anticipated Surface Pressure: 3131.64

Anticipated Bottom Hole Temperature(F): 140

#### 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:

Gazelle\_22\_B2MD\_Fed\_Com\_2H\_H2S\_Plan\_20180420171338.pdf

Well Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

#### Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

 $Gaze le\_22\_B2 MD\_Fed\_Com\_2 H\_Dir\_Plot\_20180524143507.pdf$ 

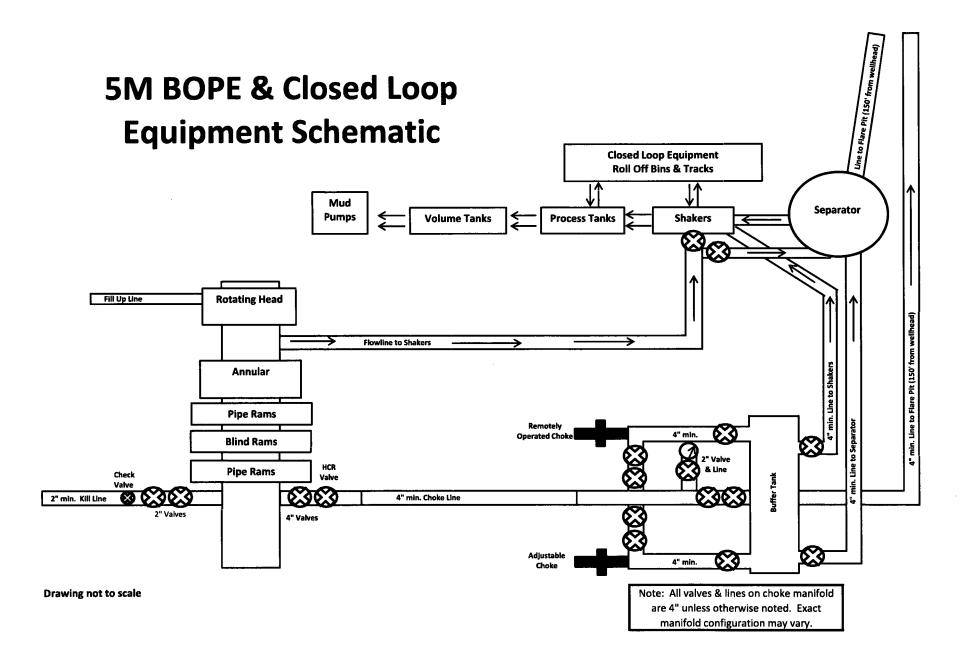
Gazelle\_22\_B2MD\_Fed\_Corn\_2H\_Dir\_Plan\_20180524143508.pdf

Other proposed operations facets description:

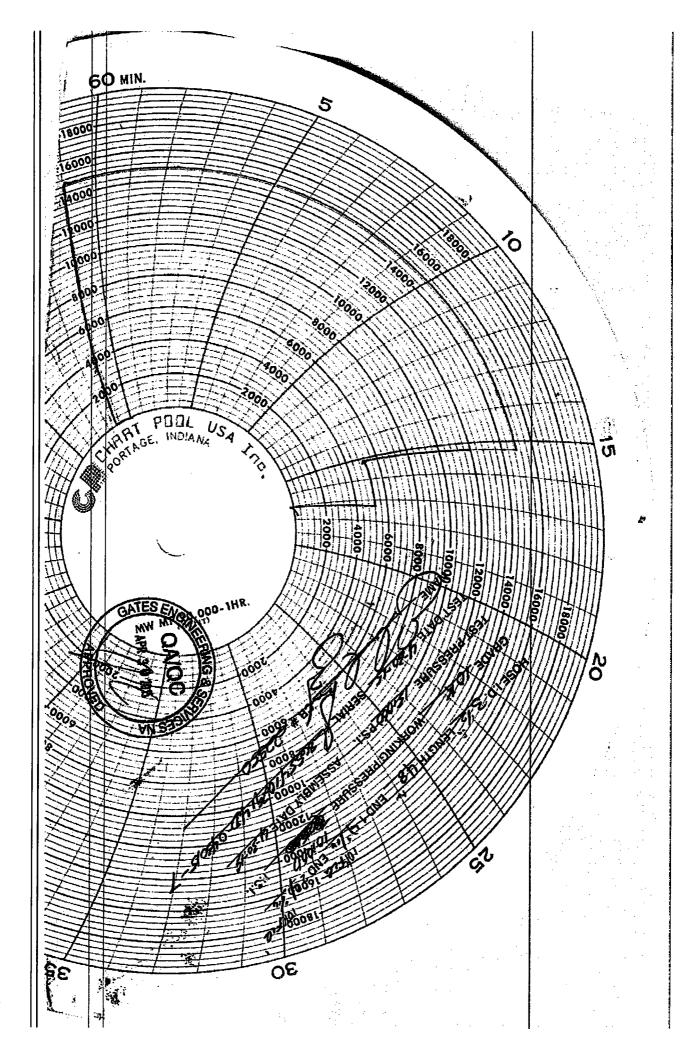
#### Other proposed operations facets attachment:

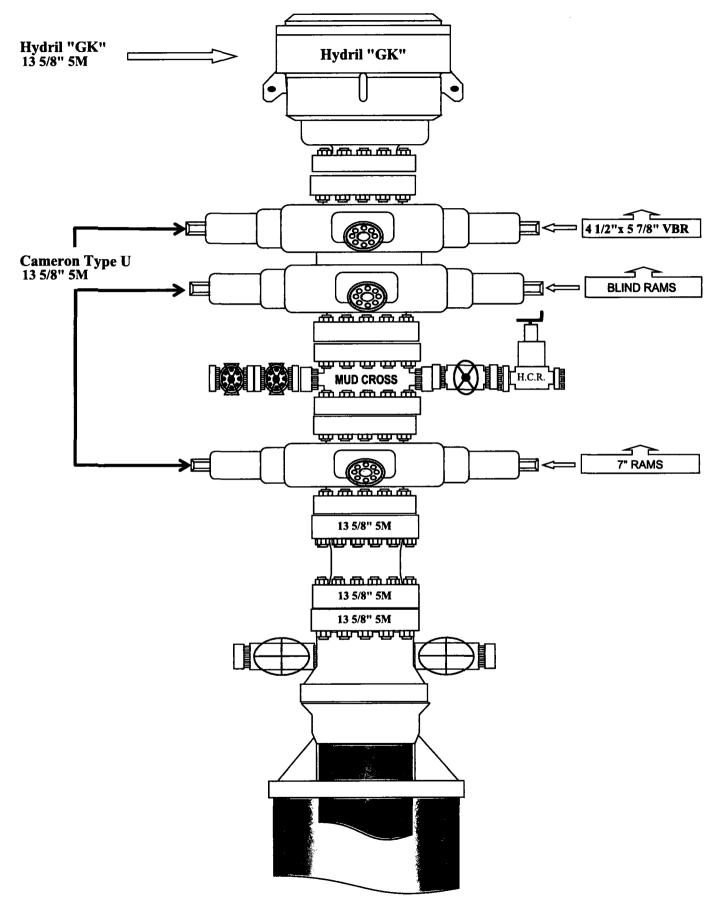
Gazelle\_22\_B2MD\_Fed\_Com\_2H\_Drtg\_Program\_20180524143458.doc

#### Other Variance attachment:



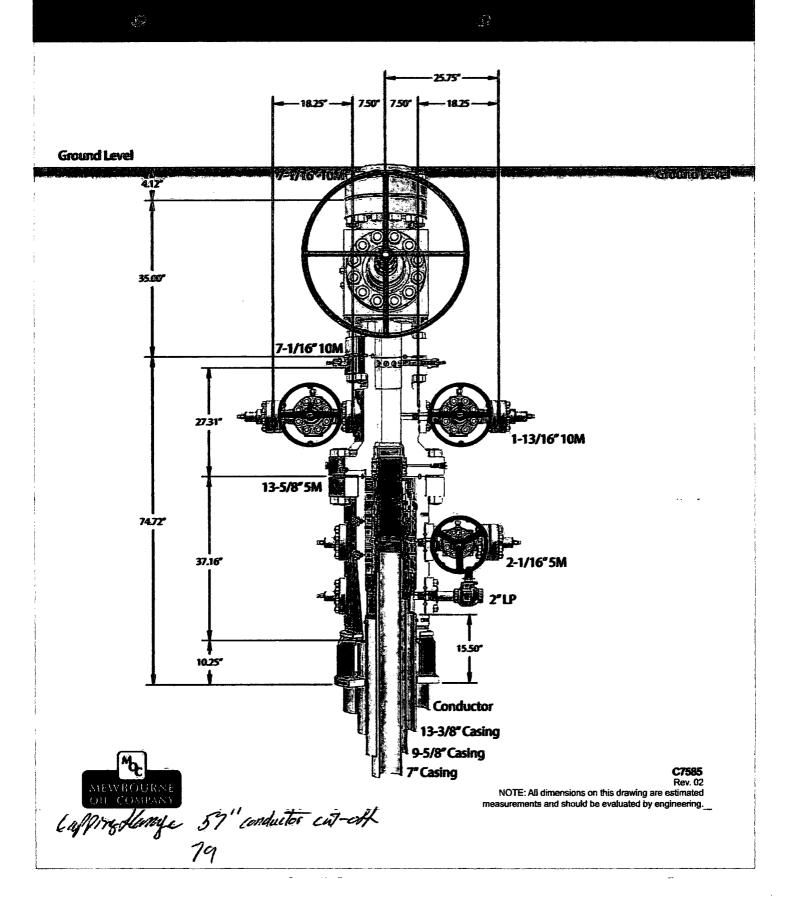
134 44TH STREE	RTH AMERICA, IN IT I, TEXAS 78405			PHONE: 361-887-980		
				FAX: 361-887-0812 EMAIL: <i>Tim.Cantu@g</i> WEB: www.gates.co	2 jates.com	
10K (	CEMENTING	ASSEMBLY	PRESSURE	TEST CERTIFICATI	E	
Customer :	AUSTIN DIST	RIPUTING	Test Date:	4/30/2015		
Customer Ref. :	40605		Hose Serial No.:	D-043015-7		
Invoice No. :	5005		Created By:	JUSTIN CROPPER		
Product Description:		10	K3.548.0CK4.1/1610KFL	GE/E LE		
End Fitting 1 :	4 1/16 10	IK FILG	End Fitting 2 :	4 1/16 10K FLG		
Gates Part No. :	4773-6	290	Assembly Code :	L36554102914D-0430	15-7	
Working Pressure :	10,000	P51	Test Pressure :	15,000 PSI		
				nose assembly has been to ments and passed the 15 m		
the Gates O hydrostatic te	ilfield Roughneck st per API Spec 7k si in accordance wi	Agreement/Spe (/Q1, Fifth Edition ith this product	cification requirem on, June 2010, Te	nents and passed the 15 n ast pressure 9.6.7 and per irst pressure 9.6.7.2 excee	ninute Table 9	
the Gates O hydrostatic te	ilfield Roughneck st per API Spec 7k si in accordance wi	Agreement/Spe (/Q1, Fifth Edition ith this product	cification requirem on, June 2010, Te number. Hose bu	nents and passed the 15 n ast pressure 9.6.7 and per irst pressure 9.6.7.2 excee	ninute Table 9	
the Gates O hydrostatic te to 15,000 ps	ilifield Roughneck / st per API Spec 7k si in accordance wi minimum c	Agreement/Spe (/Q1, Fifth Edition ith this product of 2.5 times the	cification requirem on, June 2010, Te number. Hose bu working pressure	nents and passed the 15 n est pressure 9.6.7 and per arst pressure 9.6.7.2 excee e per Table 9.	ninute Table 9 eds the	
the Gates O hydrostatic te	ilfield Roughneck st per API Spec 7k si in accordance wi	Agreement/Spe (/Q1, Fifth Edition ith this product of 2.5 times the	cification requirem on, June 2010, Te number. Hose bu	nents and passed the 15 n ast pressure 9.6.7 and per irst pressure 9.6.7.2 excee	ninute Table 9 eds the	
the Gates O hydrostatic te to 15,000 ps Quality Manager :	ilfield Roughneck / st per API Spec 7k si in accordance wi minimum c	Agreement/Spe (/Q1, Fifth Edition ith this product of 2.5 times the	cification requirem on, June 2010, Te number. Hose bu working pressure Production:	nents and passed the 15 n est pressure 9.6.7 and per arst pressure 9.6.7.2 excee e per Table 9. PRODUCTION	ninute Table 9 eds the	
the Gates O hydrostatic te to 15,000 ps Quality Manager : Date :	ilfield Roughneck / st per API Spec 7k si in accordance wi minimum c	Agreement/Spe (/Q1, Fifth Edition ith this product of 2.5 times the	cification requirem on, June 2010, Te number. Hose bu working pressure Produciton: Date :	PRODUCTION	ninute Table 9 eds the	
the Gates O hydrostatic te to 15,000 ps Quality Manager : Date :	ilfield Roughneck / st per API Spec 7k si in accordance wi minimum c	Agreement/Spe (/Q1, Fifth Edition ith this product of 2.5 times the	cification requirem on, June 2010, Te number. Hose bu working pressure Produciton: Date :	PRODUCTION	ninute Table 9 eds the	
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the Gates O hydrostatic te to 15,000 ps Quality Manager : Date :	ilfield Roughneck / st per API Spec 7k si in accordance wi minimum c	Agreement/Spe (/Q1, Fifth Edition ith this product of 2.5 times the	cification requirem on, June 2010, Te number. Hose bu working pressure Produciton: Date :	PRODUCTION	ninute Table 9 eds the	
the Gates O hydrostatic te to 15,000 ps Quality Manager : Date :	ilfield Roughneck / st per API Spec 7k si in accordance wi minimum c	Agreement/Spe (/Q1, Fifth Edition ith this product of 2.5 times the	cification requirem on, June 2010, Te number. Hose bu working pressure Produciton: Date :	PRODUCTION	ninute Table 9 eds the	
the Gates O hydrostatic te to 15,000 ps Quality Manager : Date :	ilfield Roughneck / st per API Spec 7k si in accordance wi minimum c	Agreement/Spe (/Q1, Fifth Edition ith this product of 2.5 times the	cification requirem on, June 2010, Te number. Hose bu working pressure Produciton: Date :	PRODUCTION	ninute Table 9 eds the	
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the Gates O hydrostatic te to 15,000 ps Quality Manager : Date :	ilfield Roughneck / st per API Spec 7k si in accordance wi minimum c	Agreement/Spe (/Q1, Fifth Edition ith this product of 2.5 times the	cification requirem on, June 2010, Te number. Hose bu working pressure Produciton: Date :	PRODUCTION PRODUCTION 4/30/2015 Form PTC	ninute Table 9 eds the -01 Rev.D 2	

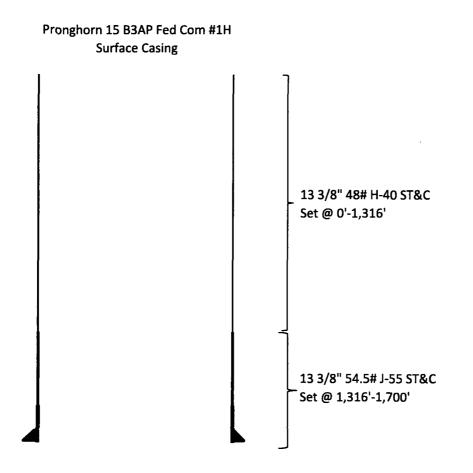




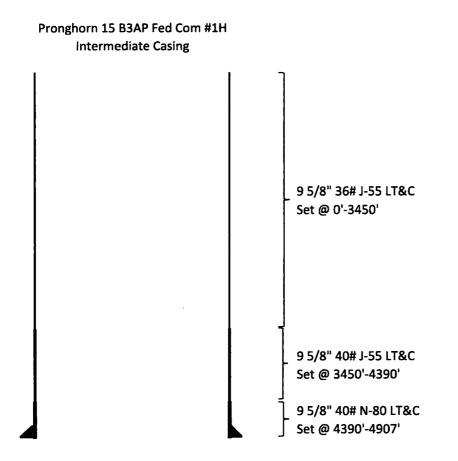


# 13-5/8" MN-DS Wellhead System

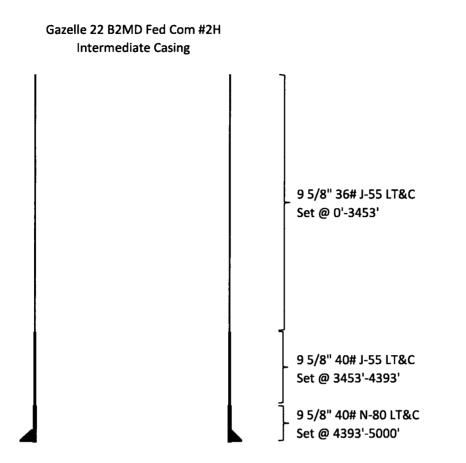




	SF	SF	SF Jt	SF Body
Casing	Collapse	Burst	Tension	Tension
48# H-40	1.13	2.53	3.83	8.56
54.5# J-55	1.28	3.09	24.58	40.78



	SF	SF	SF Jt	SF Body
Casing	Collapse	Burst	Tension	Tension
36# J-55	1.13	1.96	2.48	4.54
40# J-55	1.13	1.73	8.94	16.75
40# N-80	1.21	2.25	35.86	44.57



	SF	SF	SF Jt	SF Body
Casing	Collapse	Burst	Tension	Tension
36# J-55	1.13	1.96	2.43	4.54
40# J-55	1.13	1.73	8.4	16.75
40# N-80	1.19	2.21	30.36	37.74

# **Casing Program**

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1045'	13.375"	48	H40	STC	1.42	3.18	6.42	10.79
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.43	4.54
12.25"	3453'	4393'	9.625"	40	J55	LTC	1.13	1.73	8.40	16.75
12.25"	4393'	5000'	9.625"	40	N80	LTC	1.19	2.21	30.36	37.74
8.75"	0'	10,716'	7"	26	P110	LTC	1.50	1.92	2.32	2.98
6.125"	9967'	15,182'	4.5"	13.5	P110	LTC	1.97	2.29	4.80	5.99
		•		BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

## **Casing Program**

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1045'	13.375"	48	H40	STC	1.42	3.18	6.42	10.79
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.43	4.54
12.25"	3453'	4393'	9.625"	40	J55	LTC	1.13	1.73	8.40	16.75
12.25"	4393'	5000'	9.625"	40	N80	LTC	1.19	2.21	30.36	37.74
8.75"	0'	10,716'	7"	26	P110	LTC	1.50	1.92	2.32	2.98
6.125"	9967'	15,182'	4.5"	13.5	P110	LTC	1.97	2.29	4.80	5.99
	•			BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

# **Casing Program**

Hole	Casing Interval		Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1045'	13.375"	48	H40	STC	1.42	3.18	6.42	10.79
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.43	4.54
12.25"	3453'	4393'	9.625"	40	J55	LTC	1.13	1.73	8.40	16.75
12.25"	4393'	5000'	9.625"	40	N80	LTC	1.19	2.21	30.36	37.74
8.75"	0'	10,552'	7"	26	P110	LTC	1.51	1.92	2.39	3.03
6.125"	9960'	15,175'	4.5"	13.5	P110	LTC	1.97	2.29	4.80	5.99
			<b>*</b>	BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

# **Casing Program**

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1045'	13.375"	48	H40	STC	1.42	3.18	6.42	10.79
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.43	4.54
12.25"	3453'	4393'	9.625"	40	J55	LTC	1.13	1.73	8.40	16.75
12.25"	4393'	5000'	9.625"	40	N80	LTC	1.19	2.21	30.36	37.74
8.75"	0'	10,552'	7"	26	P110	LTC	1.51	1.92	2.39	3.03
6.125"	9960'	15,175'	4.5"	13.5	P110	LTC	1.97	2.29	4.80	5.99
			•	BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

## 1. Geologic Formations

TVD of target	10,438'	Pilot hole depth	NA
MD at TD:	15,175'	Deepest expected fresh water:	300'

Formation	Depth (TVD)	Water/Mineral Bearing/	Hazards*
	from KB	Target Zone?	
Quaternary Fill	Surface		
Rustler	970	Water	
Top Salt	2035		
Castile			
Base Salt	4325		
Yates		Oil/Gas	
Seven Rivers			
Queen			
Lamar	5075	Oil/Gas	
Bell Canyon	5100	Oil/Gas	
Cherry Canyon	5845	Oil/Gas	
Manzanita Marker			
Brushy Canyon	7270	Oil/Gas	
Bone Spring	8575	Oil/Gas	
1 <sup>st</sup> Bone Spring Sand	9650		
2 <sup>nd</sup> Bone Spring Sand	10,175	Target Zone	
3 <sup>rd</sup> Bone Spring Sand			
Abo			
Wolfcamp			
Devonian			
Fusselman			
Ellenburger			
Granite Wash			

\*H2S, water flows, loss of circulation, abnormal pressures, etc.

# 2. Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1045'	13.375"	48	H40	STC	1.42 ′	3.18	6.42	10.79
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.43	4.54
12.25"	3453'	4393'	9.625"	40	J55	LTC	1.13	1.73	8.40	16.75
12.25"	4393'	5000'	9.625"	40	N80	LTC	1.19	2.21	30.36	37.74
8.75"	0'	10,716'	7"	26	P110	LTC	1.50	1.92	2.32	2.98
6.125"	9967'	15,182'	4.5"	13.5	P110	LTC	1.97	2.29	4.80	5.99
B	LM Minin	num Safet	ty 1.125	1	1.6 Dr	y   1.6 E	)ry			
		Facto	or		1.8 W	et   1.8 V	Vet			

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	<u> </u>
is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back	
500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

## 3. Cementing Program

Casing	# Sks	Wt. Ib/ gal	Yld ft3/ sack	H <sub>2</sub> 0 gal/ sk	500# Comp. Strength (hours)	Sturry Description
Surf.	560	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Inter.	840	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Prod.	305	12.5	2.12	11	9	Lead: Class C + Gel + Retarder + Defoamer + Extender
	400	15.6	1.18	5.2	10	Tail: Class H + Retarder + Fluid Loss + Defoamer
Liner	215	11.2	2.97	17	16	Class C + Salt + Gel + Fluid Loss + Retarder + Dispersant + Defoamer + Anti-Settling Agent

A copy of cement test will be available on location at time of cement job providing pump times, compressive strengths, etc.

Casing String	TOC	% Excess
Surface	0'	100%
Intermediate	0'	25%
Production	4800'	25%
Liner	9967'	25%

#### 4. Pressure Control Equipment

Variance: None

BOP installed and tested before drilling which hole?	Size?	System Rated WP		Гуре	~	Tested to:							
			A	nnular	X	2500#							
	13-5/8"	5M	Blin	nd Ram	X								
12-1/4"			5M	5M	5M	5M	5M	5M	5M	5M	5M	5M Pipe Ram X	5000#
			Dou	ble Ram		5000#							
			Other*										

\*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

X	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
v	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
1	
	N Are anchors required by manufacturer?
Y	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after
	installation on the surface casing which will cover testing requirements for a maximum of
	30 days. If any seal subject to test pressure is broken the system must be tested.
	Provide description here: See attached schematic.

#### 5. Mud Program

TVD		Туре	Weight (ppg)	Viscosity	Water Loss	
From	То			_		
0'	1045'	Spud Mud	8.6-8.8	28-34	N/C	
1045'	5000'	BW	10.0	28-34	N/C	
5000'	9946'	FW w/ Polymer	8.6-9.7	28-34	N/C	
9946'	10,438'	OBM	8.6-10.0	30-40	<10cc	

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain	Pason/PVT/Visual Monitoring
of fluid?	

#### 6. Logging and Testing Procedures

Logg	Logging, Coring and Testing.					
X	Will run GR/CNL from KOP (9967') to surface (horizontal well - vertical portion of					
	hole). Stated logs run will be in the Completion Report and submitted to the BLM.					
	No Logs are planned based on well control or offset log information.					
	Drill stem test? If yes, explain					
	Coring? If yes, explain					

Additional logs planned		Interval
Х	Gamma Ray	9967' (KOP) to TD
	Density	
	CBL	
	Mud log	
	PEX	

#### 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	5428 psi
Abnormal Temperature	No

**Mitigation measure for abnormal conditions. Describe.** Lost circulation material/sweeps/mud scavengers in surface hole. Weighted mud for possible over-pressure in Wolfcamp formation.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

 H2S is present

 X
 H2S Plan attached

#### 8. Other facets of operation

Is this a walking operation? If yes, describe. Will be pre-setting casing? If yes, describe.

Attachments

\_\_\_\_ Directional Plan

\_\_\_\_ Other, describe

# **FAFMSS**

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

Submission Date: 04/24/2018

**Operator Name: MEWBOURNE OIL COMPANY** 

Well Name: GAZELLE 22 B2MD FED COM

: OIL WELL

Well Number: 2H Well Work Type: Drill

Rigalgarandeta Kalents the Aussi Karenda ances

07/02/2018

SUPO Data Report

Show Final Text

Well Type: OIL WELL

APD ID: 10400029580

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Gazelle22B2MDFedCom1H\_EXISTINGROADMAP\_20180524150011.pdf

Existing Road Purpose: ACCESS, FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

**Existing Road Improvement Description:** 

**Existing Road Improvement Attachment:** 

# Section 2 - New or Reconstructed Access Roads

Width (ft.): 30

Max grade (%): 3

Will new roads be needed? YES

New Road Map:

Gazelle22B2MDFedCom1H\_NEWROADMAP\_20180524150637.pdf

Feet

New road type: RESOURCE

Length: 20.1

Max slope (%): 3

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: Road with have ditch with 3:1 slope.

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Well Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: Caliche

Access onsite topsoil source depth: 1

Offsite topsoil source description:

Onsite topsoil removal process: Topsoil will be stockpiled along edge of ditch along roadside.

Access other construction information: None

Access miscellaneous information: None

Number of access turnouts: 1

Access turnout map:

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: None

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:

Gazelle22B2MDFedCom2H\_existingwellmap\_20180420134358.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 facility will be on the east of the proposed well pad.

**Production Facilities map:** 

Gazelle22B2MDFedCom1H\_PRODUCTIONFACILITYMAP\_20180524150539.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Well Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

Water source use type: DUST CONTROL, INTERMEDIATE/PRODUCTION CASING, STIMU CASING	Water source type: IRRIGATION JLATION, SURFACE				
Describe type:	Source longitude: -103.29521				
Source latitude: 32.193504					
Source datum: NAD83					
Water source permit type: WATER WELL					
Source land ownership: PRIVATE					
Water source transport method: TRUCKING					
Source transportation land ownership: PRIVATE					
Water source volume (barrels): 1940	Source volume (acre-feet): 0.2500526				
Source volume (gal): 81480					
Water source and transportation map:					
Gazelle22B2MDFedCom2H_watersourceandtransmap_20180420134533.pdf					
Water source comments:					
New water well? NO					
New Water Well Info					
Well latitude: Well Lon	gitude: Well datum:				
Well target aquifer:					
Est. depth to top of aquifer(ft):	Est thickness of aquifer:				
Aquifer comments:					
Aquifer documentation:					
Well depth (ft):	Well casing type:				
Well casing outside diameter (in.):	Well casing inside diameter (in.):				
New water well casing?	Used casing source:				
Drilling method:	Drill material:				
Grout material:	Grout depth:				
Casing length (ft.):	Casing top depth (ft.):				
Well Production type:	Completion Method:				
Water well additional information:					
State appropriation permit:					
Additional information attachment:					

Well Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

## Section 6 - Construction Materials

Construction Materials description: Private Caliche Pit

#### **Construction Materials source location attachment:**

Gazeile22B2MDFedCom2H\_calichesourceandtransmap\_20180420135102.pdf

## Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drill cuttings

Amount of waste: 940 barrels

Waste disposal frequency : One Time Only

Safe containment description: Drill cuttings will be properly contained in steel tanks (20 yard roll off bins.)

Safe containmant attachment:

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

FACILITY Disposal type description:

Disposal location description: NMOCD approved waste disposal locations are CRI or Lea Land, both facilities are located on HWY 62/180. Sec. 27 T20S R32E.

Waste type: SEWAGE

Waste content description: Human waste & grey water

Amount of waste: 1500 gallons

Waste disposal frequency : Weekly

Safe containment description: 2,000 gallon plastic container

Safe containmant attachment:

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

Disposal location description: City of Carlsbad Water Treatment facility

 Waste type: GARBAGE

 Waste content description: Garbage & trash

 Amount of waste: 1500
 pounds

 Waste disposal frequency : One Time Only

 Safe containment description: Enclosed trash trailer

 Safe containmant attachment:

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

Well Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

#### FACILITY

Disposal type description:

Disposal location description: Waste Management facility in Carlsbad.

<b>Reserve</b> P	'it
------------------	-----

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.) Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

**Reserve pit liner** 

Reserve pit liner specifications and installation description

**Cuttings Area** 

Cuttings Area being used? NO

Are you storing cuttings on location? NO

**Description of cuttings location** 

Cuttings area length (ft.)

Cuttings area depth (ft.)

Cuttings area width (ft.)

Cuttings area volume (cu. yd.)

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:** 

Well Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

Section 9 - Well Site Layout

Well Site Layout Diagram:

Gazelle22B2MDFedCom1H\_WELLSITELAYOUT\_20180524150940.pdf

Comments: None

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name:

Multiple Weil Pad Number:

Recontouring attachment:

Drainage/Erosion control construction: None

Drainage/Erosion control reclamation: None

Well pad proposed disturbance (acres): 4.132	Well pad interim reclamation (acres): 0.31	Well pad long term disturbance (acres): 3.822
Road proposed disturbance (acres): 0.04	Road interim reclamation (acres): 0	Road long term disturbance (acres): 0
Powerline proposed disturbance	Powerline interim reclamation (acres): 0	Powerline long term disturbance (acres): 0
(acres): 0 Pipeline proposed disturbance	Pipeline interim reclamation (acres): 0	
(acres): 0 Other proposed disturbance (acres): (	Other interim reclamation (acres): 0 )	Other long term disturbance (acres): 0
Total proposed disturbance: 4.172	Total interim reclamation: 0.31	Total long term disturbance: 3.822

**Disturbance Comments:** In areas to be heavily disturbed, the top 6 inches of soil material, will be stripped and stockpiled on the perimeter of the well location to keep topsoil viable, and to make redistribution of topsoil more efficient during interim reclamation. Stockpiled topsoil should include vegetative material. Topsoil will be clearly segregated and stored separately from subsoils. Contaminated soil will not be stockpiled, but properly treated and handled prior to topsoil salvaging. **Reconstruction method:** The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

**Topsoil redistribution:** Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts & fills. To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used.

Soil treatment: NA

Existing Vegetation at the well pad: Various brush & grasses

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Various brush & grasses

**Existing Vegetation Community at the road attachment:** 

Weil Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

Existing Vegetation Community at the pipeline: NA

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: NA

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 Managemer	nt	
Seed Table		
Seed type:		Seed source:
Seed name:		
Source name:		Source address:
Source phone:		
Seed cultivar:		
Seed use location:		
PLS pounds per acre:		Proposed seeding season:
Seed S	Summary	Total pounds/Acre:
Seed Type	Pounds/Acre	Ĩ

## Seed reclamation attachment:

**Operator Contact/Responsible Official Contact Info** 

First Name: Bradley

Phone: (575)393-5905

Last Name: Bishop

Email: bbishop@mewbourne.com

## Well Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

**Seedbed prep:** Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites. **Seed BMP:** To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used.

Seed method: drilling or broadcasting seed over entire reclaimed area.

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: NA

Weed treatment plan attachment:

**Monitoring plan description:** vii. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, and that erosion and invasive/noxious weeds are controlled. **Monitoring plan attachment:** 

Success standards: regrowth within 1 full growing season of reclamation.

Pit closure description: NA

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: EXISTING ACCESS ROAD

**Describe:** 

Surface Owner: OTHER

Other surface owner description: Lea County Road Dept.

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:** 

Operator Name: MEWBOURNE OIL COMPANY Well Name: GAZELLE 22 B2MD FED COM

Well Number: 2H

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

Well Number: 2H

Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

**ROW Applications** 

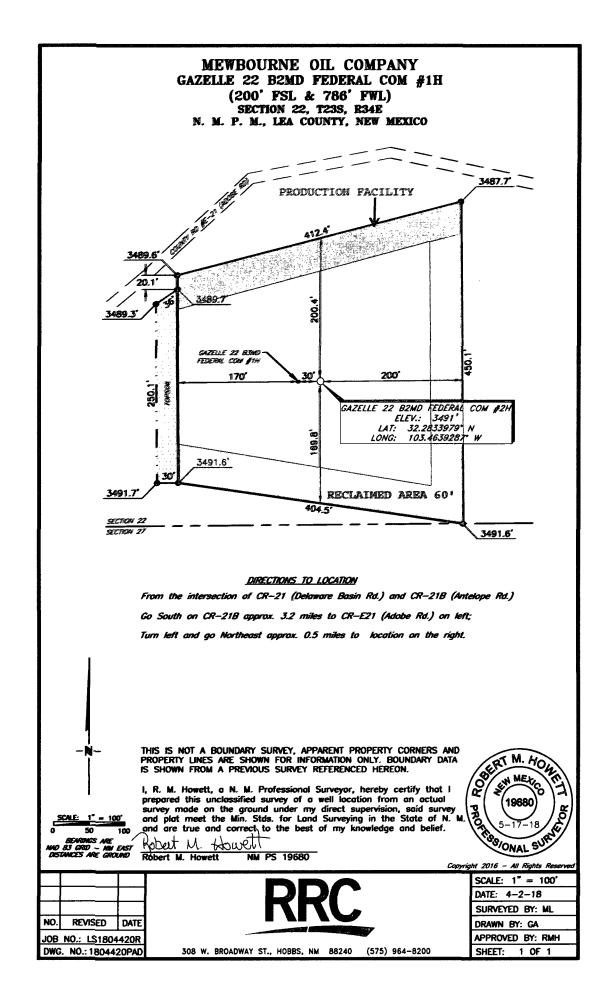
SUPO Additional Information: NONE

Use a previously conducted onsite? YES

Previous Onsite information: MAY 17 2018 Met with Paul Murphy (BLM) and RRC Surveying and Re-staked location due to playa lake on southwest side of location. Re-staked @ 200' FSL & 786' FWL, Sec 22 T23S R34E, Lea Co. NM. This is a drillable location. Location will be 450' x 400'. Will require partial use of BLM caliche pit. Will be under Gazetle 22 B3MD Fed Corn #1H environmental assessment. (BCB)

## Other SUPO Attachment

Gazelle22B2MDFedCom2H\_gascaptureplan\_20180420135309.pdf Gazelle22B2MDFedCom1H\_INTERIMRECLAMATIONMAP\_20180524151044.pdf





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



# **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 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):** 

# WAF SS

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

**Bond Information** 

Federal/Indian APD: FED

BLM Bond number: NM1693

**BIA Bond number:** 

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Bond Info Data Report

07/02/2018

Is the reclamation bond BLM or Forest Service?

BL 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: