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



FED COM

Well Name: BLACK SHEEP 4-33 B3NC Well Location: T22S / R34E / SEC 4 /

SWSW / 32,4138857 / -103,4801698

County or Parish/State: LEA /

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

NMNM0381970

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002544859

Permit to Drill

Well Status: Approved Application for

Operator: MEWBOURNE OIL COMPANY

Notice of Intent

Type of Submission: Notice of Intent

Type of Action APD Change

Date Sundry Submitted: 02/23/2021

Time Sundry Submitted: 10:27

Date proposed operation will begin: 02/23/2021

Procedure Description: Mewbourne Oil Co. requests approval to make the following change(s) to the approved APD: Change well name to Black Sheep 4/33 B3NC Fed Com #1H. Change BHL to 100' FNL & 1900' FWL, Sec 33, T21S, R34E. Change casing and cement design as detailed in the attachment.

Application

FED COM

JNC Well Location: T22S / R34E / SEC 4 /

SWSW / 32.4138857 / -103.4801698

Coun NM

: Parish/State: LEA /

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

NMNM0381970

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

Section 1 - General

APD ID: 10400014376 Tie to previous NOS?

Submission Date:

BLM Office: CARLSBAD

User: Sorina Flores

Title: Supv of Drilling Services

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM0058678

Surface access agreement in place?

Lease Acres: Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? Y

Permitting Agent? NO

APD Operator: MEWBOURNE OIL COMPANY

Operator letter of designation:

Operator Info

Operator Organization Name: MEWBOURNE OIL COMPANY

Operator Address: PO Box 5270

Zip: 88240

Operator PO Box:

Operator City: Hobbs

State: NM

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

Section 2 - Well Information

Master Development Plan name: Well in Master Development Plan? NO

Well in Master SUPO? NO Master SUPO name:

Master Drilling Plan name: Well in Master Drilling Plan? NO

Well Number: 201H Well API Number: 3002544859 Well Name: ONION KNIGHT FEDERAL

Field/Pool or Exploratory? Field and Pool Field Name: OJO CHISO Pool Name: OJO CHISO;

BONESPRING,S Is the proposed well in an area containing other mineral resources? OIL

Is the proposed well in a Helium production area? N

Use Existing Well Pad? NO

New surface disturbance?

Type of Well Pad: SINGLE WELL

Multiple Well Pad Name:

Number:

Well Class: HORIZONTAL

Number of Legs: 1

Well Work Type: Drill

Well Type: OIL WELL **Describe Well Type:**

Page 2 of 26

FED COM

3NC Well Location: T22S / R34E / SEC 4 /

SWSW / 32.4138857 / -103.4801698

Cour.

¿ Parish/State: LEA /

NM

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

NMNM0381970

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002544859

Well Status: Approved Application for

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Operator: MEWBOURNE OIL

COMPANY

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

Well sub-Type: OTHER

Describe sub-type: DEVELOPMENT

Distance to nearest well: 850 FT Distance to town: 18.7 Miles

Distance to lease line: 150 FT

Reservoir well spacing assigned acres Measurement: 160.99 Acres OnionKnightFed201H_REVPlat_signed_06-01-2017.pdf Well plat:

Well work start Date: 10/15/2017 **Duration: 28 DAYS**

Section 3 - Well Location Table

Survey Type: RECTANGULAR **Describe Survey Type:**

Vertical Datum: NAVD88 Datum: NAD83

Reference Datum: Survey number:

Wellbore	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	Will this well produce from this lease?
SHL Leg #1	150	FSL	102 5	FW L	228	34E	4	Aliquot SWS W	32.41388 57	- 103.4801 698	LEA		NEW MEXI CO	F	NMNM 038197 0	360 9	0	0	
KOP Leg #1	330	FSL	102 5	FW L	228	34E	4	Aliquot SWS W	32.41438 02	- 103.4801 686	LEA		NEW MEXI CO		NMNM 038197 0	- 677 7	104 41	103 86	
PPP Leg #1-1	182	FSL	102 5	FW L	228	34E	4	Aliquot SWS W	32.41397 45	- 103.4801 692	LEA		NEW MEXI CO	F	NMNM 038197 0	- 658 6	102 00	101 95	
EXIT Leg #1	280	FNL	102 5	FW L	228	34E	4	Aliquot NWN W	32.42731 99	- 103.4800 969	LEA		NEW MEXI CO	F	NMNM 005867 8	- 688 1	151 72	104 90	

Well Name: BLACK SHEEP 4-3 FED COM

3NC Well Location: T22S / R34E / SEC 4 /

SWSW / 32.4138857 / -103.4801698

Cour

Parish/State: LEA /

NM

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

Unit or CA Name:

Unit or CA Number:

NMNM0381970

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

Wellbore	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	Will this well produce from this lease?
BHL Leg #1	280	FNL	102 5	FW L	22S	34E		Aliquot NWN W	32.42731 99	- 103.4800 969	LEA		NEW MEXI CO		NMNM 005867 8	- 688 1	151 72	104 90	

Drilling Plan

Section 1 - Geologic Formations

RNARY 360 LER 186		1745		USEABLE WATER POTASH	N
N	4 1745	1745		POTASH	N
		1			
ADO 141	9 2190	2190		POTASH	N
F SALT -91	3700	3700		NATURAL GAS, OIL	N
N REEF -57	9 4188	4188		USEABLE WATER	N
VARE -157	71 5180	5180		NATURAL GAS, OIL	N
PRING -490	01 8510	8510		NATURAL GAS, OIL	Υ
	I REEF -57 /ARE -157	I REEF -579 4188 /ARE -1571 5180	IREEF -579 4188 4188 /ARE -1571 5180 5180	I REEF -579 4188 4188 /ARE -1571 5180 5180	I REEF -579 4188 4188 USEABLE WATER VARE -1571 5180 5180 NATURAL GAS, OIL

Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M Rating Depth: 10948

Equipment: Rotating head, mud gas separator, blow down pit, flare line

Requesting Variance? YES

Variance request: Apache requesting variance for choke flex line

Testing Procedure: BOP/BOPE will be tested by independent service company to 250psi low & pressure indicated above per Onshore Order 2 requirements. System may be upgraded to higher pressure but sill tested to WP listed . If system is upgraded, all components installed will be functional and tested. Pipe rams will be operationally checked each 24 hr period. Blind rams will be operationally checked on each TOOH. These checks will be noted on daily tour sheets. Other accessories to BOP equipment will include Kelly cock and floor safety valve (inside BOP), choke lines and choke manifold. (see attached schematic)

Choke Diagram Attachment:

OnionKnightFed_BOP_Manif_Schem_05-18-2017.pdf

BOP Diagram Attachment:

OnionKnightFed Flexline 05-18-2017.pdf

Well Name: BLACK SHEEP 4-0 FED COM

JNC Well Location: T22S / R34E / SEC 4 / SWSW / 32.4138857 / -103.4801698

Coun

: Parish/State: LEA /

NM

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

Unit or CA Name:

Unit or CA Number:

NMNM0381970

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

OnionKnightFed_BOP_Manif_Schem_05-18-2017.pdf

OnionKnightFed_BOP_Manif_Schem_05-18-2017.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	LC -1-C
1	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	310	0	310	-6881	-7191	310	J-55	40	BUTT	15.5 2	1.96	BUOY	2.39	BUOY	2,
2	SURFACE	17.5	13.375	NEW	API	N	0	1765	0	1765	-6881	-8646	1765	J-55	54,5	BUTT	2.08	1.82	BUOY	3.99	BUOY	3.
3	INTERMED IATE	12.2 5	9.625	NEW	API	N	310	5160	310	5160	-7191	12041	4850	J-55	40	LT&C	1.73	2.02	BUOY	1.8	BUOY	2.
4	PRODUCTI ON	8.75	5.5	NEW	API	N	0	10762	0	10490	-6881	- 17371	10762	P- 110	17	BUTT	1.47	1.28	BUOY	2.19	BUOY	2.
5	PRODUCTI ON	8.5	5.5	NEW	API	N	10762	15172	10490	10490		- 17371	4410	P- 110	17	BUTT	1.47	1.28	BUOY	2.19	BUOY	2.

Casing Attachments

Casing ID: 1

String Type: INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $Onion Knight Fed 201 H_Prod Csg Assumpt_05-18-2017.pdf$

FED COM

JNC Well Location: T22S / R34E / SEC 4 /

SWSW / 32.4138857 / -103.4801698

Type of Well: OIL WELL

Coun : Parish/State: LEA /

NM

Well Number: 1H

Allottee or Tribe Name:

Lease Number: NMNM0058678,

NMNM0381970

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

Casing Attachments

Casing ID: 2

String Type:SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

OnionKnightFed201H_SurfCsgAssumpt_05-18-2017.pdf

Casing ID: 3

String Type: INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

OnionKnightFed201H_ProdCsgAssumpt_05-31-2017.pdf

Casing ID: 4

String Type:PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $Onion Knight Fed 201 H_Interm Csg Assumpt_05-18-2017.pdf$

FED COM

NC Well Location: T22S / R34E / SEC 4 /

SWSW / 32.4138857 / -103.4801698

NM

Coun

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Parish/State: LEA /

Lease Number: NMNM0058678,

NMNM0381970

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002544859

Well Status: Approved Application for Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

Casing Attachments

Casing ID: 5

String Type:PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $Onion Knight Fed 201 H_Interm Csg Assumpt_05-18-2017.pdf$

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1412	709	1.73	13.5	1226. 6	25	CIC	4% bentonite, 1% CaCl2
SURFACE	Tail		1412	1765	260	1.33	14.8	345.8	25	CIC	1% CaCl2
INTERMEDIATE	Lead		0	4160	825	1.93	12.6	1592. 25	25	CIC	5% NaCl, 4% bentonite, 0.2% retarder
INTERMEDIATE	Tail		4160	5160	300	1.33	14.8	399	25	CIC	0.2% retarder
INTERMEDIATE	Lead		0	4160	825	1.93	12.6	1592. 25	25	CIC	5% NaCl, 4% bentonite, 0.2% retarder
INTERMEDIATE	Tail		4160	5160	300	1.33	14.8	399	25	CIC	0.2% retarder
PRODUCTION	Lead		4660	1001	467	3.43	10.8	1601 81	20	TXI Lite	10% Bentonite, 10 lb/sk Compressive Strength Enhancer, 5 lb/sk Silica Fume, 0.5% Fluid Loss Additive, 0.5% Defoamer, 1% SMS, 0.7% Retarder, 0.2% Organic Retarder
PRODUCTION	Tail		1001 2	1517 2	1090	1.33	13.2	1449. 7	20	TXI Lite	0.4% fluid loss, 0.3% retarder
PRODUCTION	Lead		4660	1001	467	3.43	10.8	1601. 81	20	TXI Lite	10% Bentonite + 10 lb/sk Compressive Strength Enhancer + 5 lb/sk Silica Fume + 0.5% Fluid Loss Additive + 0.5%

FED COM

NC Well Location: T22S / R34E / SEC 4 / SWSW / 32.4138857 / -103.4801698

Coun

Parish/State: LEA /

NM

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

US Well Number: 3002544859

NMNM0381970

Unit or CA Name:

Unit or CA Number:

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
									A		Defoamer + 1% SMS + 0.7% Retarder + 0.2% Organic Retarder
PRODUCTION	Tail		1001 2	1517 2	1090	1.33	13.2	1449. 7	20	TXI Lite	0.4% fluid loss + 0.3% retarder

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: BOP, choke manifold, gas buster, blow down pit, flare line with igniter, pre-mix pit, rotating head

Describe the mud monitoring system utilized: PVT, Pason, Visual monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (ibs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1765	SPUD MUD	8.3	9							
1765	5160	SALT SATURATED	9.8	10.5							
5160	1049 0	OTHER : Cut brine	8.6	9.5							

FED COM

Well Name: BLACK SHEEP 4-0

NC Well Location: T22S / R34E / SEC 4 /

Coun NM

Parish/State: LEA /

SWSW / 32.4138857 / -103.4801698

Well Number: 1H

Allottee or Tribe Name: Type of Well: OIL WELL

Lease Number: NMNM0058678,

Unit or CA Name:

Unit or CA Number:

NMNM0381970

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

Section 6 - Test, Logging, Coring

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

Will run GR/CNL from TD to surf (horizontal well - vertical portion of hole). Stated logs run will be in the completion report & submitted to BLM.

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

CBL.CNL/FDC,DS,GR,MWD,MUDLOG,TL

Coring operation description for the well:

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4909 Anticipated Surface Pressure: 2601.19

Anticipated Bottom Hole Temperature(F): 150

Anticipated abnormal pressures, temperatures, or potential geologic hazards? YES

Describe:

Capitan reef poses lost circ potential

Contingency Plans geoharzards description:

For capital reef, Apache will be switching over to a fresh water system if lost circ is encountered. A 2-stage cmt job will be proposed to get cmt to surface.

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

OnionKnightFed_H2SOpsContPlan_05-18-2017.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

OnionKnightFed201H_DirWallPlot_05-18-2017.pdf

OnionKnightFed201H_DirPlan_05-18-2017.pdf

Other proposed operations facets description:

If lost circ is encountered, Apache may 2-stage Interm csg. DVT may be used in 9-5/8" csg & ECP maybe placed below DVT. **See attachment.

- **Cmt info is duplicated in Section 4. AFMSS requires equal segments in cmt and csg. Complete cmt plan attached.
- **Apache request variance to use flexible hose between BOP and Choke Manifold. Flex hose may vary depending on rig availability. Certificate and test chart will be available for flex hose used.
- *Anticipated Completion Date: 10/1/2018
- *Anticipated First Production Date: 11/1/2018

Other proposed operations facets attachment:

OnionKnightFed201H CmtPlanAndContingencyPlan_05-31-2017.pdf

OnionKnightFed201H_CsgPlan_05-31-2017.pdf

OnionKnightFed_GasCapturePlan_07-19-2017.pdf

Other Variance attachment:

FED COM

JNC Well Location: T22S / R34E / SEC 4 / SWSW / 32.4138857 / -103.4801698

4/ Coun

Parish/State: LEA /

NM

Well Number: 1H

Type of Well: OiL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

Unit or CA Name:

Unit or CA Number:

NMNM0381970

US Well Number: 3002544859

MINIMINIOSOTOTO

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

OnionKnightFed_Flexline_05-31-2017.pdf

SUPO

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

OnionKnightFed201H_ExistRd_05-22-2017.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT

Row(s) Exist? YES

ROW ID(s)

ID:

Do the existing roads need to be improved? YES

Existing Road Improvement Description: Improve road to accommodate drilling and completion operations.

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

OnionKnightFed201H_NewAccessRd_05-22-2017.pdf

New road type: LOCAL, RESOURCE

Length: 829.96

Feet

Width (ft.): 25

Max slope (%): 2

Max grade (%): 2

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: Road will be crowned for water drainage and to control erosion.

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Turnout? N

Access surfacing type: OTHER

Access topsoil source: OFFSITE

Access surfacing type description: Caliche

FED COM

NC Well Location: T22S / R34E / SEC 4 / SWSW / 32.4138857 / -103.4801698

Coun

Parish/State: LEA /

NM

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

US Well Number: 3002544859

Unit or CA Name:

Unit or CA Number:

NMNM0381970

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

Access onsite topsoil source depth:

Offsite topsoil source description: Caliche pit located off lease

Onsite topsoil removal process:

Access other construction information:

Access miscellaneous information:

Number of access turnouts: Access turnout map:

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: Road will be crowned for water drainage

Road Drainage Control Structures (DCS) description: N/A

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

OnionKnightFed201H_1miRadius_06-05-2017.pdf

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: Approx 829.89 feet of 4 inch 150 degree buried Thermoflex PL, rated 750psi operating, to transport production will be installed from proposed well to proposed offsite production facility. A 30 feet wide disturbance will be needed to install buried PL. In areas where blading is allowed, topsoil will be stockpiled and separated from excavated trench mineral material. Final reclamation procedures will match procedures in plans for surface reclamation. When excavated soil is backfilled, it will be compacted to prevent subsidence. No berm over pipeline will be evident. The proposed pipeline does not cross lease boundaries, so a ROW will not need to be acquired from BLM. Production Facilities map:

OnionKnightFed201H Flowline_05-23-2017.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: OTHER

Describe type: BRINE

INTERMEDIATE/PRODUCTION Water source use type:

CASING

Source latitude: 32.48407

Source longitude: -103.15848

Source datum: NAD83

PRIVATE CONTRACT Water source permit type:

FED COM

NC Well Location: T22S / R34E / SEC 4 /

SWSW / 32.4138857 / -103.4801698

Coun

Parish/State: LEA /

NM

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

NMNM0381970

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

INTERMEDIATE/PRODUCTION CASING

Water source transport method:

TRUCKING

Source land ownership: FEDERAL

Source transportation land ownership: FEDERAL

Water source volume (barrels): 4000

Source volume (acre-feet): 0.51557237

Source volume (gal): 168000

Water source type: GW WELL

Water source use type:

STIMULATION

Source latitude: 32.423138

Source longitude: -103.54925

Source datum: NAD83

Water source permit type:

null

Water source transport method:

PIPELINE

Source land ownership: STATE

Source transportation land ownership: STATE

Water source volume (barrels): 25000

Source volume (acre-feet): 3.2223275

Source volume (gal): 1050000

Water source type: GW WELL

Water source use type:

SURFACE CASING

INTERMEDIATE/PRODUCTION

CASING

Source latitude: 32.48407

Source longitude: -103.15848

Source datum: NAD83

Water source permit type:

PRIVATE CONTRACT

Water source transport method:

TRUCKING

Source land ownership: FEDERAL

Source transportation land ownership: FEDERAL

Water source volume (barrels): 3000

Source volume (acre-feet): 0.3866793

FED COM

NC Well Location: T22S / R34E / SEC 4 / SWSW / 32.4138857 / -103.4801698

Coun

Parish/State: LEA /

NM

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

NMNM0381970

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

Source volume (gal): 126000

Water source type: GW WELL

Water source use type:

STIMULATION

Source latitude: 32.423138

Source longitude: -103.54925

Source datum: NAD83

Water source permit type:

WATER WELL

Water source transport method:

PIPELINE

Source land ownership: STATE

Source transportation land ownership: STATE

Water source volume (barrels): 25000

Source volume (acre-feet): 3,2223275

Source volume (gal): 1050000

Water source and transportation map:

OnionKnightFed201H_FW_05-23-2017.pdf OnionKnightFed201H_FW_Alt_05-31-2017.pdf OnionKnightFed201H_BrineWtr_05-23-2017.pdf

Water source comments: Listed is preferred water source but may change due to availability. Water volume may be adjusted depending on conditions.

New water well? NO

New Water Well Info

Well latitude:

Well Longitude:

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: Grout material:

Drill material:

Grout depth:

Casing length (ft.): Well Production type: Casing top depth (ft.):

Water well additional information:

Completion Method:

FED COM

NC Well Location: T22S / R34E / SEC 4 / SWSW / 32.4138857 / -103.4801698

Coun

Parish/State: LEA /

NM

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

Unit or CA Name:

Unit or CA Number:

NMNM0381970

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES

Construction Materials description: Dirt fill and caliche will be used to construct well pad

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: GARBAGE

Waste content description: Garbage and trash produced during drilling and completion operations

Amount of waste: 1500 pounds Waste disposal frequency: Weekly

Safe containment description: Garbage and trash produced during drilling and completion ops will be collected in portable

trash trailers and disposed of properly at a state approved disposal facility.

Safe containment attachment:

Disposal location ownership: STATE Waste disposal type: OTHER

Disposal type description: Landfill

Disposal location description: Lea County Landfill

Waste type: SEWAGE

Waste content description: Human waste and grey water

Amount of waste: 2000 Waste disposal frequency: Weekly

Safe containment description: Wast will be properly contained and disposed of.

Safe containment attachment:

Waste disposal type: OTHER Disposal location ownership: STATE

Disposal type description: State

Disposal location description: Hobbs Municipal Wast Facility

Waste type: PRODUCED WATER

Waste content description: Produced water during production operations

Amount of waste: 5000 barrels Waste disposal frequency: Daily

Safe containment description: Frac tanks

Safe containment attachment:

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

FACILITY

Disposal type description:

FED COM

NC Well Location: T22S / R34E / SEC 4 /

SWSW / 32.4138857 / -103.4801698

SWSW / 32.4138857 / -103.480°

Well Number: 1H Type of Well: OIL WELL

Allottee or Tribe Name:

Parish/State: LEA /

Coun

NM

Lease Number: NMNM0058678,

NMNM0381970

Unit or CA Name:

Unit or CA Number:

1410114100001010

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

Disposal location description: Commercial SWDs in area

Waste type: FLOWBACK

Waste content description: Flwoback water during flowback operations

Amount of waste: 5000 barrels

Waste disposal frequency: Daily

Safe containment description: Frac tanks

Safe containmant attachment:

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

FACILITY

Disposal type description:

Disposal location description: Commercial SWDs in area

Waste type: COMPLETIONS/STIMULATION

Waste content description: Flowback water during completion operations

Amount of waste: 5000 barrels

Waste disposal frequency: Weekly

Safe containment description: Frac tanks

Safe containment attachment:

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

FACILITY

Disposal type description:

Disposal location description: R360 or commercial SWD, pending type of water produced

Waste type: DRILLING

Waste content description: Drilling fluids, produced oil and water while drilling and completion operations

Amount of waste: 2500 barrels

Waste disposal frequency: Weekly

Safe containment description: All drilling and completion waste will be stored in frac tanks and disposed of properly

Safe containment attachment:

Waste disposal type: RECYCLE Disposal location ownership: OTHER

Disposal type description:

Disposal location description: Next well or trucked to an approved disposal facility.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

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

FED COM

NC Well Location: T22S / R34E / SEC 4 /

SWSW / 32.4138857 / -103.4801698

Type of Well: OIL WELL

Allottee or Tribe Name:

Parish/State: LEA /

Well Number: 1H

Lease Number: NMNM0058678.

US Well Number: 3002544859

NMNM0381970

Unit or CA Name:

Unit or CA Number:

Well Status: Approved Application for

Operator: MEWBOURNE OIL

Permit to Drill

COMPANY

Coun

NM

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? YES

Description of cuttings location Cuttings will be stored in steel haul off bins and taken to an NMOCD approved disposal

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (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:

Section 9 - Well Site Layout

Well Site Layout Diagram:

OnionKnightFed201H_WellsiteDiagram_05-23-2017.pdf

Comments: V-door may change based on rig availability.

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name:

Multiple Well Pad Number:

Recontouring attachment:

Drainage/Erosion control construction: During construction, proper erosion control methods will be used to control erosion, runoff and siltation of surrounding area and will be maintained to control dust and minimize erosion to extent practical.

Drainage/Erosion control reclamation: Topsoil and subsoils shall be replaced to their original relative positions and contoured as to achieve erosion control, long-term stability and preservation of surface water flow patterns. Distrubed area shall be reseeded in the first favorable growing season. Please note: Reclamation can be delayed until such time as there

FED COM

NC Well Location: T22S / R34E / SEC 4 /

SWSW / 32.4138857 / -103.4801698

Coun

Parish/State: LEA /

NM

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

NMNM0381970

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

are no pending permits or no activity is planned for 5 years. Interim reclamation may vary pending surface conditions at the time but amount of long term disturbance will be same as described on permit.

Well pad interim reclamation (acres):

Well pad proposed disturbance

Pipeline proposed disturbance

Total proposed disturbance:

(acres):

(acres):

(acres):

Road interim reclamation (acres):

Well pad long term disturbance

(acres): 3.37

Road proposed disturbance (acres): Powerline proposed disturbance

Road long term disturbance (acres):

0.571

Powerline interim reclamation (acres): Powerline long term disturbance

(acres):

Pipeline interim reclamation (acres):

0.0003939394

Pipeline long term disturbance

Other interim reclamation (acres):

(acres): 0 Other long term disturbance (acres): 0

Other proposed disturbance (acres):

5.449 Total interim reclamation: 9.390394

Total long term disturbance: 3.941

Disturbance Comments: Other short term disturbance is for proposed electrical line, approx. 7912.61 feet in length and 30 foot wide for construction on North end of all pads. Elect line will run West to East and will be installed to provide electricity to all proposed federal and state wells on all proposed pads.

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 surrounding topography as much as possible. Where applicable, any fill material of well pad will be backfilled into the cut to bring area back to original contour. Topsoil redistribution: Topsoils shall be replaced to their original relative positions and contoured to achieve erosion control, long term stability and preservation of surface water flow pattern. Topsoil will be revegitated over entire disturbed area not needed for all weather operations.

Soil treatment: After all disturbed areas have been properly prepared, areas will need to be seeded with recommended seed mixture, free of noxious weeds. Final seedbed prep will consist of contour cultivating to a depth of 4-6 inches within 24 hrs prior to seeding, dozer tracking or other imprinting in order to break soil crust to create seed germination micro-sites. 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

FED COM

NC Well Location: T22S / R34E / SEC 4 /

SWSW / 32,4138857 / -103.4801698

Coun NM

Parish/State: LEA /

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

NMNM0381970

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed Summary

Total pounds/Acre:

Seed reclamation attachment:

Seed Type

Operator Contact/Responsible Official Contact Info

Pounds/Acre

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: Standard regular weed maintenance to maintain a clear location and road on as needed basis.

Weed treatment plan attachment:

Monitoring plan description: Identify area supporting weeds prior to construction, prevent introduction and spread of weeds from construction equipment during construction and contain weed seeds and propagules by preventing segregated topsoil from being spread to adjacent areas. No invasive species present. Standard regular maintenance to maintain a clear location and road.

Monitoring plan attachment:

Success standards: Maintain all disturbed areas as per Gold Book standards. Please note: Reclamation can be delayed until such time as there are no pending permits or no activity is planned for 5 years. Interim reclamation may vary pending surface conditions at the time but amount of long term disturbance will be same as described on permit.

Pit closure description: N/A

Pit closure attachment:

Section 11 - Surface Ownership

FED COM

NC Well Location: T22S / R34E / SEC 4 /

SWSW / 32.4138857 / -103.4801698

Type of Well: OIL WELL Well Number: 1H

Allottee or Tribe Name:

Parish/State: LEA /

Coun

NM

Lease Number: NMNM0058678,

Unit or CA Name:

Unit or CA Number:

NMNM0381970

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

Disturbance type: WELL PAD

Describe:

Surface Owner:

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: PIPELINE

Describe:

Surface Owner:

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:

FED COM

NC Well Location: T22S / R34E / SEC 4 /

SWSW / 32.4138857 / -103.4801698

Type of Well: OIL WELL

Coun Parish/State: LEA /

NM

Allottee or Tribe Name:

Lease Number: NMNM0058678,

NMNM0381970

Well Number: 1H

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner:

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:

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:

FED COM

NC Well Location: T22S / R34E / SEC 4 / SWSW / 32.4138857 / -103.4801698

Coun Parish/State: LEA / NM

Type of Well: OIL WELL Well Number: 1H

Allottee or Tribe Name:

Lease Number: NMNM0058678,

NMNM0381970

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

Disturbance type: OTHER Describe: ELECTRICAL LINE

Surface Owner:

Other surface owner description:

BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office: NPS Local Office: State Local Office:

USFWS Local Office: Other Local Office:

Military 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: Arch survey has been completed by Boone Arch Services. Operator Rep: Larry VanGilder, Drlg Supt, 432-818-1965 or 432-557-1097; Operator Production Rep: Heath Dean, 575-631-0125. Apache plans to insall an overhead electrical line for the proposed well. Total length of line will be 7912.61 feet with approx. 30 feet of disturbance. Elect line will be constructed to provide protection from raptor electrocution. Proposed line does not cross lease boundaries. ROW grant will not need to be acquired from BLM.

Use a previously conducted onsite? YES

Previous Onsite information: Onsite completed by Jeffery Robertson on 1/31/17 for Onion Knight Federal 201H, 202H, 203H and 204H.

Other SUPO Attachment

OnionKnightFed201H_NewAccessRd_05-23-2017.pdf OnionKnightFed201H_Flowline_05-23-2017.pdf

FED COM

NC Well Location: T22S / R34E / SEC 4 /

SWSW / 32.4138857 / -103.4801698

Coun

Parish/State: LEA /

NM

Type of Well: OIL WELL Well Number: 1H

Allottee or Tribe Name:

Lease Number: NMNM0058678,

NMNM0381970

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

OnionKnightFed201H_to_207H_ElectLine_05-23-2017.pdf

PWD

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:

PWD disturbance (acres):

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?

FED COM

NC Well Location: T22S / R34E / SEC 4 /

SWSW / 32.4138857 / -103.4801698

Coun

Parish/State: LEA /

NM

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

NMNM0381970

Unit or CA Name:

Permit to Drill

Unit or CA Number:

US Well Number: 3002544859

Well Status: Approved Application for

Operator: MEWBOURNE OIL

COMPANY

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD disturbance (acres):

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

FED COM

NC Well Location: T22S / R34E / SEC 4 / SWSW / 32.4138857 / -103.4801698

/ Coun

Parish/State: LEA /

NM

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

NMNM0381970

Unit or CA Name:

Unit or CA Number:

MINIMINIOSOTSTO

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number:

Injection well name:

Assigned injection well API number?

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:

PWD disturbance (acres):

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:

PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

Operator Certification

FED COM

Well Number: 1H

NC Well Location: T22S / R34E / SEC 4 /

SWSW / 32.4138857 / -103.4801698

Type of Well: OIL WELL

Allottee or Tribe Name:

NM

Parish/State: LEA /

Lease Number: NMNM0058678,

Unit or CA Name:

Unit or CA Number:

NMNM0381970

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

Zip:

Coun

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.

Signed on: 02/23/2021 NAME: Sorina Flores

Title: Supv of Drilling Services

Street Address: 303 Veterans Airpark Ln #1000

Zip: 79705 City: Midland State: TX

Phone: (432)818-1167

Email address: sorina.flores@apachecorp.com

Field Representative

Representative Name:

Street Address:

State: City:

Email address:

Phone:

NOI Attachments

Procedure Description

Black_Sheep_4_33_B3NC_Fed_Com_1H_Sundry_20210223102643.doc

Black_Sheep_4_33_B3NC_Fed_Com_1H_Dir_Plot_20210223102631.pdf

FED COM

NC Well Location: T22S / R34E / SEC 4 /

SWSW / 32.4138857 / -103.4801698

Coun NM

Parish/State: LEA /

Well Number: 1H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0058678,

NMNM0381970

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002544859

Well Status: Approved Application for

Permit to Drill

Operator: MEWBOURNE OIL

COMPANY

Black_Sheep_4_33_B3NC_Fed_Com_1H_Dir_Plan_20210223102631.pdf Black_Sheep_4_33_B3NC_Fed_Com_1H_C_102_20210223102621.pdf

Conditions of Approval

Additional Reviews

BLACK_SHEEP_4_33_B3NC_FED_COM_1H_Sundry_1516188__Drilling_COA_OTA_20210226150507.pdf

Operator Certification

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

Signed on: FEB 23, 2021 10:12 AM Operator Electronic Signature: TAYLOR

Name: MEWBOURNE OIL COMPANY

Title: Engineer

Street Address: PO Box 5270

City: Hobbs State: NM

Phone: (575) 393-5905

Email address:

Field Representative

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

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

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

Disposition Date: 03/01/2021 **Disposition:** Approved

Signature: Chris Walls

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fest: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Birazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

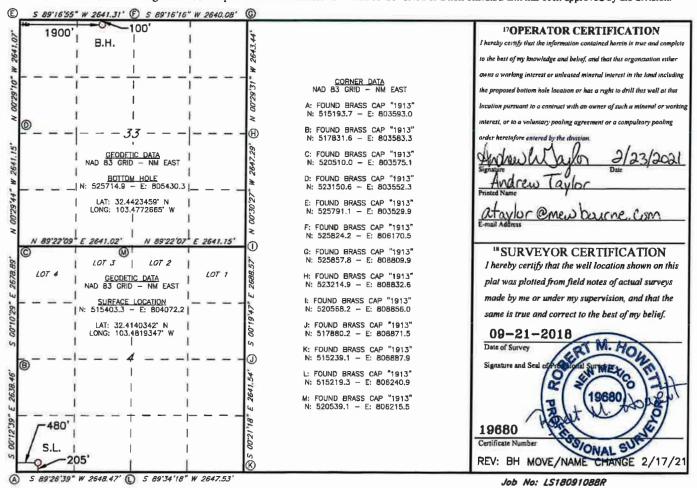
State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

■ AMENDED REPORT

30-025-44859 WELL LOCATION AND ACREAGE DEDICATION PLAT I API Number 30-015-44859 8430 ⁴Property Code 5 Property Name Well Number 325164 BLACK SHEEP 4/33 B3NC FED COM 1H 7 OGRID NO. 8 Operator Name Elevation MEWBOURNE OIL COMPANY 3608 10 Surface Location UL or lot no. Section Township Lot Idn Feet from the North/South line Range Feet From the East/West line County M **22S** 34E 205 SOUTH 480 WEST LEA 11 Bottom Hole Location If Different From Surface UL or lot no. Township Lot Idn Feet from the North/South line Range Feet from the East/West line County 33 **21S** 34E 100 NORTH 1900 WEST LEA 12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No.

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



Mewbourne Oil Company

Lea County, New Mexico NAD 83 Black Sheep 4/33 B3NC Fed Com #1H Sec 4, T22S, R34E

SHL: 205' FSL & 480' FWL, Sec 4 BHL: 100' FNL & 1900' FWL, Sec 33

Plan: Design #1

Standard Planning Report

22 February, 2021

Database: Hobbs
Company: Mewbourne Oil Company
Project: Lea County, New Mexico NAD 83
Site: Black Sheep 4/33 B3NC Fed Com #1H
Well: Sec 4, T22S, R34E

Well: Sec 4, T22S, R34E
Wellbore: BHL: 100' FNL & 1900' FWL, Sec 33

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Black Sheep 4/33 B3NC Fed Com #1H WELL @ 3636.0usft (Original Well Elev) WELL @ 3636.0usft (Original Well Elev)

Grid

Minimum Curvature

Project Lea County, New Mexico NAD 83

Map System: US State Plane 1983
Geo Datum: North American Datum 1983

Geo Datum: North American Datum 1983

Map Zone: New Mexico Eastern Zone

System Datum:

Mean Sea Level

Black Sheep 4/33 B3NC Fed Com #1H Site 515,403.00 usft 32.4140334 Northing: Latitude: Site Position: -103.4819353 804,072.00 usft Longitude: Easting: Map From: 0.46° Slot Radius: 13-3/16 " **Grid Convergence: Position Uncertainty:** 0.0 usft

Sec 4, T22S, R34E Well 32,4140334 515,403.00 usft Latitude: **Well Position** +N/-S 0.0 usft Northing: -103.4819353 804,072.00 usft Longitude: +E/-W 0.0 usft Easting: 3,608.0 usft 0.0 usft Wellhead Elevation: 3,636.0 usft **Ground Level: Position Uncertainty**

 Wellbore
 BHL: 100' FNL & 1900' FWL, Sec 33

 Magnetics
 Model Name
 Sample Date (°)
 Declination (°)
 Dip Angle (°)
 Field Strength (nT)

 IGRF2010
 12/31/2014
 7.12
 60.29
 48,384

Design Design #1 Audit Notes: PROTOTYPE 0.0 Tie On Depth: Version: Phase: Direction +E/-W Vertical Section: Depth From (TVD) +N/-S (usft) (°) (usft) (usft) 0.0 7.50 0.0 0.0

an Sections Measured			Vertical			Dogleg	Build	Turn		
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,850.0	0.00	0.00	1,850.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,331.3	9.63	97.26	2,329.1	-5.1	40.0	2.00	2.00	0.00	97.26	
10,415.1	9.63	97.26	10,299.0	-175.9	1,381.0	0.00	0.00	0.00	0.00	
10,896.4	0.00	0.00	10,778.0	-181.0	1,421.0	2.00	-2.00	0.00	180,00	KOP: 10' FSL & 190
11,783.6	88.70	359.66	11,351.0	379.1	1,417.6	10.00	10.00	0.00	-0.34	
21,719.3	88.70	359.66	11,576.0	10,312.0	1,358.0	0.00	0.00	0.00	0.00	BHL: 100' FNL & 19

Database: Company: Project:

Site:

Hobbs

Mewbourne Oil Company

Lea County, New Mexico NAD 83 Black Sheep 4/33 B3NC Fed Com #1H

Well: Sec 4, T22S, R34E

Wellbore: BHL: 100' FNL & 1900' FWL, Sec 33

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Black Sheep 4/33 B3NC Fed Com #1H WELL @ 3636.0usft (Original Well Elev)

WELL @ 3636.0usft (Original Well Elev)
Grid

Minimum Curvature

Measured			Vertical			Vertical	Dogleg Rate	Build Rate	Turn Rate
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Section (usft)	(°/100usft)	(°/100usft)	(°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL: 205' FS	L & 480' FWL (4))							
100.0	0.00	0.00	100.0	0.0	0,0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0,0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0,00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
0.008	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0,00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0,0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0,0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400_0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,850.0	0.00	0.00	1,850.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	1.00	97.26	1,900.0	-0.1	0.4	0.0	2.00	2.00	0.00
2,000.0	3.00	97.26	1,999.9	-0.5	3.9	0.0	2.00	2.00	0.00
2,100.0	5.00	97.26	2,099.7	-1.4	10.8	0.0	2.00	2.00	0.00
2,200.0	7.00	97.26	2,199.1	-2.7	21.2	0.1	2.00	2.00	0.00
2,300.0	9,00	97.26	2,298.2	-4.5	35.0	0.1	2.00	2.00	0.00
2,331.3	9,63	97.26	2,329.1	-5.1	40.0	0,2	2.00	2.00	0.00
2,400.0	9,63	97.26	2,396.8	-6.5	51.4	0.2	0.00	0.00	0.00
2,500.0	9.63	97.26	2,495.4	-8.7	68.0	0.3	0.00	0.00	0.00
2,600.0	9.63	97.26	2,594.0	-10.8	84.6	0.4	0.00	0.00	0.00
2,700.0	9.63	97.26	2,692.5	-12.9	101.2	0,4	0.00	0.00	0.00
2,800.0	9.63	97.26	2,791.1	-15.0	117.8	0.5	0.00	0.00	0.00
2,900.0	9,63	97.26	2,889.7	-17.1	134.4	0.6	0.00	0.00	0.00
3,000.0	9.63	97.26	2,988.3	-19.2	150.9	0.6	0.00	0.00	0.00
3,100.0	9.63	97.26	3,086.9	-21.3	167.5	0.7	0.00	0.00	0.00
3,200.0	9.63	97.26	3,185.5	-23.5	184.1	0.8	0.00	0.00	0.00
3,300.0	9.63	97.26	3,284.1	-25.6	200.7	0.9	0.00	0.00	0.00
3,400.0	9.63	97.26	3,382.7	-27.7	217.3	0.9	0.00	0.00	0.00
3,500.0	9.63	97.26	3,481.3	-29.8	233.9	1.0	0.00	0.00	0.00
3,600.0	9.63	97.26	3,579.9	-31.9	250.5	1.1	0.00	0.00	0.00
3,700.0	9.63	97.26	3,678.5	-34.0	267.1	1.1	0.00	0.00	0.00
3,800.0	9.63	97.26	3,777.1	-36.1	283.6	1.2	0.00	0.00	0.00
3,900.0	9.63	97.26	3,875.6	-38.2	300.2	1.3	0.00	0.00	0.00
4,000.0	9.63	97.26	3,974.2	-40.4	316.8	1.4	0.00	0.00	0.00
4,100.0	9.63	97.26	4,072.8	-42.5	333.4	1.4	0.00	0.00	0.00
4,200.0	9.63	97.26	4,171.4	-44.6	350.0	1.5	0.00	0.00	0.00
4,300,0	9.63	97.26	4,270.0	-46.7	366.6	1.6	0.00	0.00	0.00
4,400.0	9.63	97.26	4,368.6	-48.8	383.2	1.6	0.00	0.00	0.00
4,500.0	9.63	97.26	4,467.2	-50.9	399.8	1.7	0.00	0.00	0.00
4,600.0	9.63	97.26	4,565.8	-53.0	416.4	1.8	0.00	0.00	0.00
4,700.0	9.63	97.26	4,664.4	-55.1	432.9	1.9	0.00	0.00	0.00
4,800.0	9.63	97.26	4,763.0	-57.3	449.5	1.9	0.00	0.00	0.00
4,900.0	9.63	97.26	4,861.6	-59.4	466.1	2.0	0.00	0.00	0.00

2/22/2021 6:04:52PM Page 3 COMPASS 5000.1 Build 72

Database: Company: Project: Site:

Well:

Hobbs

Mewbourne Oil Company

Lea County, New Mexico NAD 83 Black Sheep 4/33 B3NC Fed Com #1H

Sec 4, T22S, R34E BHL: 100' FNL & 1900' FWL, Sec 33

Wellbore: BHL: 100'
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Site Black Sheep 4/33 B3NC Fed Com #1H WELL @ 3636.0usft (Original Well Elev) WELL @ 3636.0usft (Original Well Elev)

Grid

Minimum Curvature

	Design #1								
d Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
5,100,0	9.63	97.26	5,058.8	-63.6	499.3	2.1	0.00	0.00	0.00
5,200.0	9.63	97.26	5,157.3	-65.7	515.9	2.2	0.00	0.00	0.00
·					500 F		0.00	0.00	0.00
5,300.0	9.63	97,26	5,255.9	-67.8	532.5	2.3	0.00	0.00	0.00
5,400.0	9,63	97.26	5,354.5	-69.9	549.1	2.3 2.4	0.00	0.00	0.00
5,500.0	9,63	97.26	5,453.1	-72.0 74.2	565.7 582.2	2.4	0.00	0.00	0.00
5,600.0	9.63	97.26	5,551.7	-74.2 -76.3	598.8	2.6	0.00	0.00	0.00
5,700.0	9,63	97.26	5,650.3						
5,800.0	9.63	97.26	5,748.9	-78.4	615.4	2.6	0.00	0.00	0.00
5,900.0	9.63	97.26	5,847.5	-80,5	632.0	2.7	0.00	0.00	0.00
6,000.0	9.63	97.26	5,946.1	-82.6	648.6	2,8	0.00	0.00	0.00
6,100.0	9.63	97.26	6,044.7	-84.7	665.2	2.8	0.00	0.00	0.00
6,200.0	9.63	97.26	6,143.3	-86.8	681.8	2.9	0.00	0.00	0.00
6,300.0	9.63	97.26	6,241.9	-89.0	698.4	3.0	0.00	0.00	0.00
6,400.0	9.63	97.26	6,340.4	-91.1	714.9	3.1	0.00	0.00	0.00
6,500.0	9,63	97.26	6,439.0	-93.2	731.5	3.1	0.00	0.00	0.00
6,600.0	9.63	97.26	6,537.6	-95.3	748.1	3.2	0.00	0.00	0.00
6,700.0	9.63	97.26	6,636.2	-97.4	764.7	3.3	0.00	0.00	0.00
6,800.0	9.63	97.26	6,734.8	-99.5	781.3	3.3	0.00	0.00	0.00
6,900.0	9.63	97.26	6,833.4	-101.6	797.9	3.4	0.00	0.00	0.00
7,000.0	9.63	97.26	6,932.0	-103.7	814.5	3.5	0.00	0.00	0.00
7,100.0	9.63	97.26	7,030.6	-105.9	831.1	3.6	0.00	0.00	0.00
7,200.0	9.63	97.26	7,129.2	-108.0	847.7	3.6	0.00	0.00	0.00
7,300.0	9.63	97.26	7,227.8	-110.1	864.2	3.7	0.00	0.00	0.00
7,400.0	9.63	97.26	7,326.4	-112,2	880.8	3.8	0.00	0.00	0.00
7,500.0	9.63	97.26	7,425.0	-114.3	897.4	3.8	0.00	0.00	0.00
7,600.0	9.63	97.26	7,523.5	-116.4	914.0	3.9	0.00	0.00	0.00
7,700.0	9.63	97.26	7,622.1	-118.5	930.6	4.0	0.00	0.00	0.00
	0.63	97.26	7,720.7	-120.6	947.2	4.1	0.00	0.00	0.00
7,800.0	9.63 9.63	97.26	7,720.7	-120.8	963.8	4.1	0.00	0.00	0.00
7,900.0 8,000.0	9.63	97.26	7,917.9	-124.9	980.4	4.2	0.00	0.00	0.00
8,100.0	9.63	97.26	8,016.5	-127.0	997.0	4.3	0.00	0.00	0.00
8,200.0	9.63	97.26	8,115.1	-129.1	1,013.5	4.3	0.00	0.00	0.00
6,200.0									
8,300.0	9.63	97.26	8,213.7	-131.2	1,030.1	4.4	0.00	0.00	0.00
8,400.0	9.63	97.26	8,312.3	-133.3	1,046.7	4.5	0.00	0.00	0.00
8,500.0	9.63	97.26	8,410.9	-135,4	1,063.3	4.6	0.00	0.00	0.00
8,600.0	9.63	97.26	8,509.5	-137.6	1,079.9	4.6	0.00	0.00	0.00
8,700-0	9.63	97.26	8,608.1	-139.7	1,096.5	4.7	0.00	0.00	0.00
8,800.0	9.63	97.26	8,706.7	-141.8	1,113.1	4.8	0.00	0.00	0.00
8,900.0	9.63	97.26	8,805.2	-143.9	1,129.7	4.8	0.00	0.00	0.00
9,000.0	9.63	97.26	8,903.8	-146.0	1,146.2	4.9	0.00	0.00	0.00
9,100.0	9.63	97.26	9,002.4	-148.1	1,162.8	5.0	0.00	0.00	0.00
9,200.0	9.63	97.26	9,101.0	-150.2	1,179.4	5.0	0.00	0.00	0.00
						5.1	0.00	0.00	0.00
9,300.0	9.63	97,26	9,199.6	-152.3 154.5	1,196.0 1,212.6	5.2	0.00	0.00	0.00
9,400.0	9.63 9.63	97.26	9,298.2 9,396.8	-154.5 -156.6	1,212.6	5.3	0.00	0.00	0.00
9,500.0		97.26			1,245.8	5.3	0.00	0.00	0.00
9,600.0	9.63 9.63	97.26 97.26	9,495.4 9,594.0	-158.7 -160.8	1,245.6	5.4	0.00	0.00	0.00
9,700.0	9.03								
9,800.0	9.63	97.26	9,692.6	-162.9	1,279.0	5.5	0.00	0,00	0.00
9,900.0	9.63	97.26	9,791-2	-165.0	1,295.5	5.5	0.00	0.00	0.00
10,000.0	9.63	97.26	9,889.8	-167.1	1,312.1	5.6	0.00	0.00	0.00
10,100.0	9.63	97.26	9,988.3	-169.2	1,328.7	5.7	0.00	0.00	0.00
10,200.0	9.63	97.26	10,086.9	-171.4	1,345.3	5.8	0.00	0.00	0.00
10.300.0	9.63	97.26	10,185.5	-173.5	1,361.9	5.8	0.00	0.00	0.00
10,300.0	9.63	97.26	10,183.3	-175.6	1,378.5	5.9	0.00	0.00	0.00

2/22/2021 6:04:52PM Page 4 COMPASS 5000.1 Build 72

Database: Company: Project:

Site:

Hobbs

Mewbourne Oil Company

Lea County, New Mexico NAD 83 Black Sheep 4/33 B3NC Fed Com #1H

Well: Sec 4, T22S, R34E

Wellbore:

BHL: 100' FNL & 1900' FWL, Sec 33

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Site Black Sheep 4/33 B3NC Fed Com #1H WELL @ 3636.0usft (Original Well Elev) WELL @ 3636.0usft (Original Well Elev)

Grid

Minimum Curvature

E .	Design #1								
ed Survey	11						US I		
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
						5.9	0.00	0.00	0.00
10,415.1	9.63	97.26	10,299.0	-175.9 -177.5	1,381.0 1,393.8	6.0	2.00	-2.00	0.00
10,500.0	7.93	97.26	10,382.9		1,405.8	6.0	2.00	-2.00	0.00
10,600.0	5,93	97.26	10,482.2	-179.1	1,405.6				
10,700.0	3.93	97.26	10,581.8	-180.1	1,414.3	6.1	2.00	-2.00	0.00
10,800.0	1.93	97.26	10,681.7	-180.8	1,419.4	6.1	2.00	-2.00	0.00
10,896.4	0.00	0.00	10,778.0	-181.0	1,421.0	6.1	2.00	-2.00	0.00
KOP: 10' FS	L & 1900' FWL (4	1)							
10,900.0	0.36	359.66	10,781.6	-181.0	1,421.0	6.1	10,00	10.00	0.00
11,000.0	10.36	359.66	10,881.1	-171.7	1,420.9	15.3	10.00	10.00	0.00
11,100.0	20.36	359.66	10,977.4	-145.2	1,420.8	41.5	10.00	10.00	0.00
11,200.0	30.35	359.66	11,067.6	-102.4	1,420.5	83.9	10.00	10.00	0.00
11,221.2	32.47	359.66	11,085.7	-91.4	1,420.5	94.8	10.00	10.00	0.00
	SL & 1900' FWL (
11,300.0	40.35	359.66	11,149.1	-44.7	1,420.2	141.1	10.00	10.00	0.00
11,400.0	50.35	359.66	11,219.3	26.4	1,419.8	211.5	10.00	10.00	0.00
							10.00	10.00	0.00
11,500.0	60.35	359.66	11,276.1	108.5	1,419.3	292.9	10.00	10.00	0.00
11,600.0	70.34	359.66	11,317.7	199.3	1,418.7	382.8 478.6	10.00	10.00	0.00
11,700.0	80.34	359.66	11,343.0	295.9	1,418.1 1,417.6	560.9	10.00	10.00	0.00
11,783.6	88.70	359.66	11,351.0	379.1	1,417.0	300.5	10.00	10.00	0.00
	_ & 1900' FWL (4		44.054.4	205.5	4 447 5	577.2	0.01	0.01	0.00
11,800.0	88.70	359.66	11,351.4	395.5	1,417.5	311.2			
11,900.0	88.70	359.66	11,353.6	495.4	1,416.9	676.2	0.00	0.00	0.00
12,000.0	88.70	359.66	11,355.9	595.4	1,416,3	775.2	0.00	0.00	0.00
12,100.0	88.70	359,66	11,358.2	695.4	1,415.7	874.3	0.00	0.00	0.00
12,200.0	88.70	359.66	11,360.4	795.4	1,415.1	973.3	0.00	0.00	0.00
12,300.0	88.70	359.66	11,362.7	895.3	1,414.5	1,072.4	0.00	0.00	0.00
12,400.0	88.70	359.66	11,365.0	995.3	1,413.9	1,171.4	0.00	0.00	0.00
12,500.0	88.70	359.66	11,367.2	1,095.3	1,413.3	1,270.4	0.00	0.00	0.00
12,600.0	88.70	359.66	11,369.5	1,195.2	1,412.7	1,369.5	0.00	0.00	0.00
12,700.0	88.70	359.66	11,371.8	1,295.2	1,412.1	1,468.5	0.00	0.00	0.00
12,800.0	88.70	359.66	11,374.0	1,395.2	1,411.5	1,567.5	0.00	0.00	0.00
12,900.0	88.70	359.66	11,376.3	1,495.2	1,410.9	1,666.6	0.00	0.00	0.00
13,000.0	88.70	359.66	11,378.5	1,595.1	1,410.3	1,765.6	0.00	0.00	0.00
13,100.0	88.70	359.66	11,380.8	1,695.1	1,409.7	1,864.7	0.00	0.00	0.00
13,200.0	88.70	359.66	11,383.1	1,795.1	1,409.1	1,963.7	0.00	0.00	0.00
13,300.0	88.70	359.66	11,385.3	1,895.1	1,408.5	2,062.7	0.00	0.00	0.00
				1,995.0	1,407.9	2,161.8	0.00	0.00	0.00
13,400.0	88.70	359.66 359.66	11,387.6 11,389.9	2,095.0	1,407.9	2,161.8	0.00	0.00	0.00
13,500.0	88.70 88.70	359.66	11,389.9	2,095.0 2,195.0	1,407.3	2,250.6	0.00	0.00	0.00
13,600.0 13,700.0	88.70	359.66	11,394.4	2,193.0	1,406.1	2,458.9	0.00	0.00	0.00
13,700.0	88.70	359.66	11,396.7	2,394.9	1,405.5	2,557.9	0.00	0.00	0.00
13,853.5	88.70	359.66	11,397.9	2,448.4	1,405.2	2,610.9	0.00	0.00	0.00
	FNL & 1900' FW					0.057.6	2.00	0.00	0.00
13,900.0	88.70	359.66	11,398.9	2,494.9	1,404.9	2,657.0	0.00	0.00	0.00 0.00
14,000.0	88.70	359.66	11,401.2	2,594.9	1,404.3	2,756.0	0.00 0.00	0.00	0.00
14,100.0	88.70	359.66	11,403.5	2,694.8	1,403.7	2,855.0	0.00	0.00	0.00
14,200.0	88.70	359.66	11,405.7	2,794.8	1,403.1	2,954.1			
14,300.0	88.70	359.66	11,408.0	2,894.8	1,402.5	3,053.1	0.00	0.00	0.00
14,400.0	88.70	359.66	11,410.2	2,994.8	1,401.9	3,152.2	0.00	0.00	0.00
14,500.0	88.70	359.66	11,412.5	3,094.7	1,401.3	3,251.2	0.00	0.00	0.00
14,600.0	88.70	359.66	11,414.8	3,194.7	1,400.7	3,350.2	0.00	0.00	0.00
14,700.0	88.70	359.66	11,417.0	3,294.7	1,400.1	3,449.3	0.00	0.00	0.00
14,800.0	88.70	359.66	11,419.3	3,394.6	1,399.5	3,548.3	0.00	0.00	0.00

Database: Company: Project:

Site:

Hobbs

Mewbourne Oil Company

Lea County, New Mexico NAD 83 Black Sheep 4/33 B3NC Fed Com #1H

Well: Sec 4, T22S, R34E
Wellbore: BHL: 100' FNL & 1900' FWL, Sec 33

Wellbore: BHL: 100'
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Black Sheep 4/33 B3NC Fed Com #1H WELL @ 3636.0usft (Original Well Elev) WELL @ 3636.0usft (Original Well Elev)

Grid

Minimum Curvature

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,900.0	88.70	359.66	11,421.6	3,494.6	1,398.9	3,647.4	0.00	0.00	0.00
15,000.0	88.70	359.66	11,423.8	3,594.6	1,398.3	3,746.4	0.00	0.00	0.00
15,100.0	88.70	359.66	11,426.1	3,694.6	1,397.7	3,845.4	0.00	0.00	0.00
15,200.0	88.70	359.66	11,428.4	3,794.5	1,397.1	3,944.5	0.00	0.00	0.00
15,300.0	88.70	359.66	11,430.6	3,894.5	1,396.5	4,043.5	0.00	0.00	0.00
15,400.0	88.70	359.66	11,432.9	3,994.5	1,395.9	4,142.5	0.00	0.00	0.00
15,500.0	88,70	359.66	11,435.2	4,094.5	1,395.3	4,241.6	0.00	0.00	0.00
15,600.0	88.70	359.66	11,437.4	4,194.4	1,394.7	4,340.6	0.00	0.00	0.00
15,700.0	88.70	359.66	11,439.7	4,294.4	1,394.1	4,439.7	0.00	0.00	0.00
· ·							0.00	0.00	0.00
15,800.0	88.70	359.66	11,442.0	4,394.4	1,393.5	4,538.7			
15,900.0	88.70	359.66	11,444.2	4,494.3	1,392.9	4,637.7	0.00	0.00	0.00
16,000.0	88.70	359.66	11,446.5	4,594.3	1,392.3	4,736.8	0.00	0.00	0.00
16,100.0	88.70	359.66	11,448.7	4,694.3	1,391.7	4,835.8	0.00	0.00	0.00
16,200.0	88.70	359.66	11,451.0	4,794.3	1,391.1	4,934.9	0.00	0.00	0.00
16,300.0	88.70	359,66	11,453.3	4,894.2	1,390.5	5,033.9	0.00	0.00	0.00
16,400.0	88.70	359.66	11,455.5	4,994.2	1,389.9	5,132.9	0.00	0.00	0.00
16,500.0	88.70	359.66	11,457.8	5,094.2	1,389.3	5,232.0	0.00	0.00	0.00
16,533.2	88.70	359.66	11,458.6	5,127.4	1,389.1	5,264.9	0.00	0.00	0.00
	L & 1900' FWL (3		.,,						
16,600.0	88.70	359.66	11,460,1	5,194.2	1,388.7	5,331.0	0.00	0.00	0.00
16,700.0	88.70	359.66	11,462.3	5,294.1	1,388.1	5,430.0	0.00	0.00	0.00
16,800.0	88.70	359.66	11,464.6	5,394.1	1,387.5	5,529.1	0.00	0.00	0.00
16,900.0	88.70	359.66	11,466.9	5,494.1	1,386.9	5,628.1	0.00	0.00	0.00
17,000.0	88.70	359.66	11,469.1	5,594.0	1,386.3	5,727.2	0.00	0.00	0.00
17,100.0	88.70	359.66	11,471.4	5,694.0	1,385.7	5,826.2	0.00	0.00	0.00
17,200.0	88.70	359.66	11,473.7	5,794.0	1,385.1	5,925.2	0,00	0.00	0.00
17,300.0	88.70	359.66	11,475.9	5,894.0	1,384.5	6,024.3	0.00	0.00	0.00
17,400.0	88.70	359.66	11,478.2	5,993.9	1,383.9	6,123.3	0.00	0.00	0.00
	88.70	359.66	11,480.5	6,093.9	1,383.3	6,222.4	0.00	0.00	0.00
17,500.0 17,600.0	88.70	359.66	11,482.7	6,193.9	1,382.7	6,321.4	0.00	0.00	0.00
								0.00	0.00
17,700.0	88.70	359.66	11,485.0	6,293.8	1,382.1	6,420.4	0.00		0.00
17,800.0	88.70	359.66	11,487.2	6,393.8	1,381.5	6,519.5	0.00	0.00	
17,900.0	88.70	359.66	11,489.5	6,493.8	1,380.9	6,618.5	0.00	0.00	0.00
18,000.0	88.70	359.66	11,491.8	6,593.8	1,380.3	6,717.5	0.00	0.00	0.00
18,100.0	88.70	359.66	11,494.0	6,693.7	1,379.7	6,816.6	0.00	0.00	0.00
18,200.0	88.70	359.66	11,496.3	6,793.7	1,379.1	6,915.6	0.00	0.00	0.00
18,300.0	88.70	359.66	11,498.6	6,893.7	1,378.5	7,014.7	0.00	0.00	0.00
18,400.0	88.70	359.66	11,500.8	6,993.7	1,377.9	7,113.7	0.00	0.00	0.00
18,500.0	88.70	359.66	11,503.1	7,093.6	1,377.3	7,212.7	0.00	0.00	0.00
18,600.0	88.70	359.66	11,505.4	7,193.6	1,376.7	7,311.8	0.00	0.00	0.00
18,700.0	88.70	359.66	11,507.6	7,293.6	1,376.1	7,410.8	0.00	0.00	0.00
18,800.0	88.70	359.66	11,509.9	7,393.5	1,375.5	7,509.9	0.00	0.00	0.00
18,900.0	88.70	359.66	11,512.2	7,493.5	1,374.9	7,608.9	0.00	0.00	0.00
19,000.0	88.70	359.66	11,514.4	7,593.5	1,374.3	7,707.9	0.00	0.00	0.00
19,100.0	88.70	359.66	11,516.7	7,693.5	1,373.7	7,807.0	0.00	0.00	0.00
19,200.0	88.70	359.66	11,518.9	7,793.4	1,373.1	7,906.0	0.00	0.00	0.00
19,300.0	88.70	359.66	11,521.2	7,893.4	1,372.5	8,005.0	0.00	0.00	0.00
					1,372.5	8,104.1	0.00	0.00	0.00
19,400.0	88.70	359.66	11,523.5	7,993.4				0.00	0.00
19,500.0	88.70	359.66	11,525.7	8,093.4	1,371.3	8,203.1 8,303.2	0.00 0.00	0.00	0.00
19,600.0	88.70	359.66	11,528.0	8,193.3	1,370.7	8,302,2			
19,700.0	88.70	359.66	11,530.3	8,293.3	1,370:1	8,401.2	0.00	0.00	0.00
19,800.0	88.70	359.66	11,532.5	8,393.3	1,369.5	8,500.2	0.00	0.00	0.00
19,900.0	88.70	359.66	11,534.8	8,493.2	1,368.9	8,599.3	0.00	0.00 0.00	0.00

Database: Company: Project:

Site:

Hobbs

Mewbourne Oil Company

Lea County, New Mexico NAD 83 Black Sheep 4/33 B3NC Fed Com #1H

Well: Sec 4, T22S, R34E

 Wellbore:
 BHL: 100' FNL & 1900' FWL, Sec 33

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

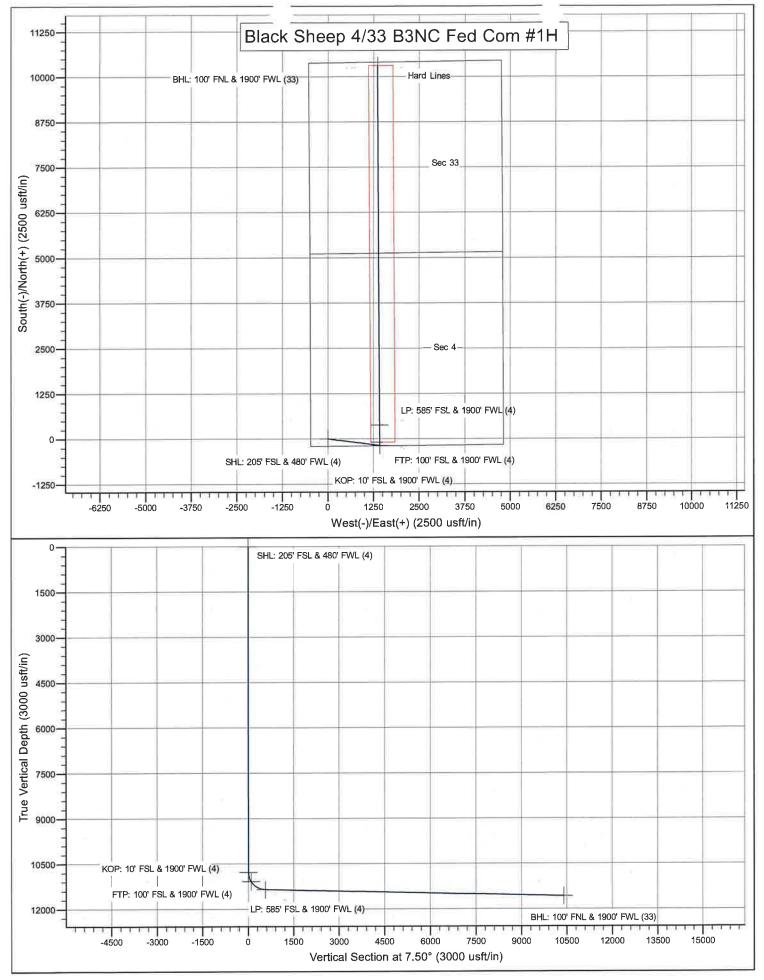
Site Black Sheep 4/33 B3NC Fed Com #1H WELL @ 3636.0usft (Original Well Elev) WELL @ 3636.0usft (Original Well Elev)

Grid

Minimum Curvature

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
20,100.0	88.70	359,66	11,539.3	8,693.2	1,367.7	8,797.3	0.00	0.00	0.00
20,200.0	88.70	359.66	11,541.6	8,793.2	1,367.1	8,896.4	0.00	0.00	0.00
20,300.0	88.70	359.66	11,543.9	8,893.1	1,366.5	8,995.4	0.00	0.00	0.00
20,400.0	88.70	359.66	11,546.1	8,993.1	1,365.9	9,094.5	0.00	0.00	0.00
20,500.0	88.70	359.66	11,548.4	9,093.1	1,365.3	9,193.5	0.00	0.00	0.00
20,600.0	88.70	359.66	11,550.7	9,193.1	1,364.7	9,292.5	0.00	0.00	0.00
20,700.0	88.70	359.66	11,552,9	9,293.0	1,364.1	9,391.6	0.00	0.00	0.00
20,800.0	88.70	359.66	11,555.2	9,393.0	1,363.5	9,490.6	0.00	0.00	0.00
20,900.0	88.70	359.66	11,557.4	9,493.0	1,362.9	9,589.7	0.00	0.00	0.00
21,000.0	88.70	359.66	11,559.7	9,592.9	1,362,3	9,688.7	0.00	0.00	0.00
21,100.0	88.70	359.66	11,562.0	9,692.9	1,361.7	9,787.7	0.00	0.00	0.00
21,200.0	88.70	359.66	11,564.2	9,792.9	1,361.1	9,886.8	0.00	0.00	0.00
21,300.0	88.70	359.66	11,566.5	9,892.9	1,360.5	9,985.8	0.00	0.00	0.00
21,400.0	88.70	359.66	11,568.8	9,992.8	1,359.9	10,084.8	0.00	0.00	0.00
21,500.0	88.70	359.66	11,571.0	10,092.8	1,359.3	10,183.9	0.00	0.00	0.00
21,600.0	88.70	359.66	11,573.3	10,192.8	1,358.7	10,282.9	0.00	0.00	0.00
21,700.0	88.70	359.66	11,575.6	10,292.8	1,358.1	10,382.0	0.00	0,00	0.00
21,719.3	88.70	359.66	11,576.0	10,312.0	1,358.0	10,401.0	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle	Dip Dir.	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL: 205' FSL & 480' FV - plan hits target cent - Point	0.00 er	0.00	0.0	0.0	0.0	515,403.00	804,072.00	32,4140334	-103.4819353
KOP: 10' FSL & 1900' F\ - plan hits target centor - Point	0.00 er	0.00	10,778.0	-181.0	1,421.0	515,222.00	805,493.00	32.4135047	-103.4773357
FTP: 100' FSL & 1900' F - plan hits target centor - Point	0.00 er	0.00	11,085.7	-91.4	1,420.5	515,311.60	805,492.46	32.4137510	-103,4773351
LP: 585' FSL & 1900' FV - plan hits target cent - Point	0.00 er	0.00	11,351.0	379.1	1,417.6	515,782.10	805,489.64	32.4150442	-103.4773320
PPP2: 2679' FNL & 1900 - plan hits target cente - Point	0.00 er	0.00	11,397.9	2,448.4	1,405.2	517,851.40	805,477.21	32.4207320	-103.4773186
PPP3: 0' FSL & 1900' F\ - plan hits target cente - Point	0.00 er	0.00	11,458.6	5,127.4	1,389,1	520,530.40	805,461.13	32.4280956	-103,4773011
BHL: 100' FNL & 1900' F - plan hits target cent - Point	0.00 er	0.00	11,576.0	10,312.0	1,358.0	525,715.00	805,430.00	32.4423462	-103.4772674



Mewbourne Oil Company, Black Sheep 4/33 B3NC Fed Com #1H Sec 4, T22S, R34E

SL: 205' FSL & 480' FWL (Sec 4) BHL: 100' FNL & 1900' FWL (Sec 33)

Casing Program

Hole	Casing	g Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1495'	13.375"	48	H40	STC	1.13	2.53	3.68	6.19
17.5"	1495'	1782'	13.375"	54.5	J55	STC	1.39	3.35	32.94	54.67
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	2.16	2.68
12.25"	3453'	4393'	9.625"	40	J55	LTC	1.13	1.73	6.05	7.34
12.25"	4393'	5282'	9.625"	40	N80	LTC	1.13	2.09	15.27	18.98
12.25"	5282'	5600'	9.625"	40	HCL80	LTC	1.45	1.97	65.81	72.02
8.75"	0'	11,784'	7"	26	P110	LTC	1.36	1.74	2.26	2.71
6.125"	10,896'	21,720'	4.5"	13.5	P110	LTC	1.48	1.72	2.31	2.89
	-			BLM Min	imum Safet	y Factor	1.125	1	1.6 Dry	1.6 Dry
									1.8 Wet	1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Must have table for contingency casing

	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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P? If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	N
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd 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?	

Mewbourne Oil Company, Black Sheep 4/33 B3NC Fed Com #1H Sec 4, T22S, R34E

SL: 205' FSL & 480' FWL (Sec 4) BHL: 100' FNL & 1900' FWL (Sec 33)

Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ 0 gal/ sk	500# Comp. Strength (hours)	Slurry Description
Surf.	1045	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.	215	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
Stg 1	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
					ECP/DV T	ool @ 3775'
Inter.	640	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
Stg 2	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Prod.	450	12.5	2.12	11	9	Lead: Class C + Salt + Gel + Extender + LCM
	400	15.6	1.18	5.2	10	Tail: Class H + Retarder + Fluid Loss + Defoamer
Liner	435	11.2	2.97	18	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.

Casing String	TOC	% Excess
Surface	0'	100%
Intermediate	0'	25%
Production	4287'	25%
Liner	10,896'	25%

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: | MEWBOURNE OIL COMPANY

LEASE NO.: | NMNM0381970

WELL NAME & NO.: | BLACK SHEEP 4-33 B3NC FED COM 1H

SURFACE HOLE FOOTAGE: 205' FSL & 480' FWL **BOTTOM HOLE FOOTAGE** 100' FNL & 1900' FWL

LOCATION: | Section 4, T. 22 S., R 34 E., NMPM

COUNTY: Lea County, New Mexico

COA

H2S	← Yes	● No	
Potash	None	○ Secretary	← R-111-P
Cave/Karst Potential	• Low		← High
Variance	None	Flex Hose	○ Other
Wellhead	Conventional	Multibowl	← Both
Other	☐ 4 String Area	Capitan Reef	□WIPP
Other	Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	₩ COM	□ Unit

All Previous COAs Still Apply.

A. CASING

- 1. The 13-3/8 inch surface casing shall be set at approximately 1782 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing, which shall be set at approximately 5600 feet is:

Option 1 (Single Stage):

• Cement to surface. If cement does not circulate see B.1.a, c-d above. Excess cement calculates to -61%, additional cement might be required.

Option 2:

Operator has proposed DV tool at depth of 3775', but will adjust cement proportionately if moved, the depth may be adjusted as long as the cement is changed proportionally. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range. If an ECP is used, it is to be set a minimum of 50' below the shoe to provide cement across the shoe. If it cannot be set below the shoe, a CBL shall be run to verify cement coverage. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
- Cement to surface. If cement does not circulate, contact the appropriate BLM office.
- ❖ Special Capitan Reef requirements. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
 - Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
 - Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

Production casing must be kept fluid filled to meet BLM minimum collapse requirement.

- 3. The minimum required fill of cement behind the 7 inch production casing is:
 - Cement should tie-back at least 50 feet above the Capitan Reef. Operator shall provide method of verification.
 Excess cement calculates to 23%, additional cement might be required.
- 4. The minimum required fill of cement behind the 4-1/2 inch production liner is:
 - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

B. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
- 2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

C. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

OTA02262021

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

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

Phone:(505) 334-6178 Fax:(505) 334-6170

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

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

CONDITIONS

Action 22023

CONDITIONS OF APPROVAL

Operator:			OGRID:		Action Type:
MEWBOURNE OIL CO	P.O. Box 5270	Hobbs, NM88241	14744	22023	C-103A

OCD Reviewer	Condition
pkautz	None