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

Phone: (505) 476-3460 Fax: (505) 476-3462

RECEIVED State of New Mexico

Energy, Minerals & Natural Resources Department 2020
OIL CONSERVATION DIVISION 271

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

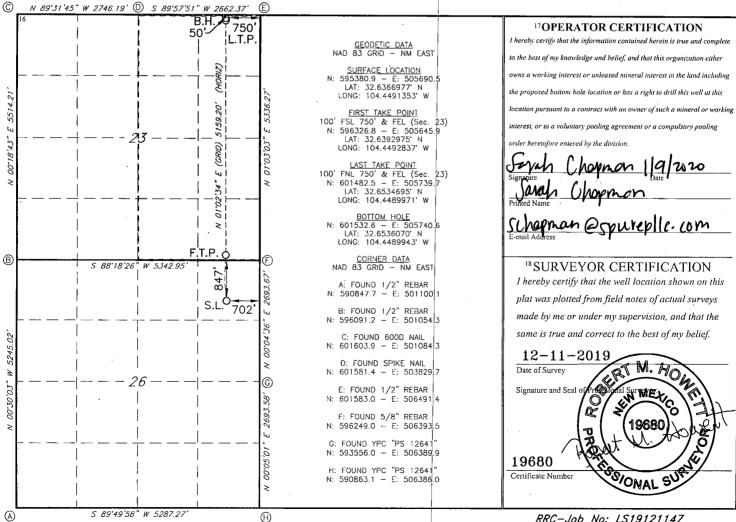
District Office

☐ AMENDED REPORT

1220 South St. Francisch RD-OCD ARTESIA Santa Fe, NM 8750 NRD-OCD ARTESIA

WELL LOCATION AND ACREAGE DEDICATION PLAT API Number ² Pool Code King: filorieth - Yeso 1565 5 Property Name ⁴Property Code 6 Well Number SHELBY 23 5H 7OGRID NO 8 Operator Name ⁹Elevation 32894 SPUR ENERGY PARTNERS LLC 3415 ¹⁰ Surface Location UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet From the East/West line County 26 25E 19S 847 NORTH A 702 EAST **EDDY** 11 Bottom Hole Location If Different From Surface UL or lot no. Section Lot Idn Feet from the North/South line Township Range Feet from the East/West line County A 23 19S 25E 50 NORTH 750 **EAST EDDY** 12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No. 320

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.



RRC-Job No: LS19121147

1/29/20 KS

Inten	t X	As Dril	led									,	
API#													
Ope	rator Nai	me:				Prop	erty Na	ime:					Well Number
SPL	JR ENE	RGY PA	RTNER	S LLO	2	SHE	ELBY 2	23					5H
	,												
Kick C	Off Point	(KOP)							,				
A A	Section 26	Township 19S	Range 25E	Lot	Feet 838		From N/	S TH 7	9eet 37	Fron	ST	County EDD	Y
32	.636	72		-1	Longitu -10	^{ide} 4.4	492	52				NAD	083
F	- 1 - 5 -	. (575)					-						
	Take Poin	it (FTP)	Range	Lot	Feet	 -	From N/	S E	pet	From	5 E/\A/	County	
P Latitu	Section 23	195	25E	Lot	100 Longitu		SÖÜ	řн 7	50	ËΑ	ŠŤ	EDD'	Y
32	.639	2974			-10	4.4	492	837	7			NAD	083
Last T	ake Poin	t (LTP)											
A A	Section 23	Township 19S	Range 25E	Lot	Feet 100	Fron	n N/S RTH	750	From	ŠT	Count	ĎΥ	
32	.639	2975			Longitu -10	^{ide} 4.4	492	837	7		NAD NA	D83	
		defining v	vell for th	e Horiz	ontal Sp	pacing	Unit?						
Is this	well an i	nfill well?		YES									
	l is yes pl ng Unit.	ease prov	ide API if a	availab	le, Oper	rator N	Name ai	nd wel	l numbe	er for [Definin	g well fo	r Horizontal
API#													
Ope	rator Nar	ne:				Prop	erty Na	me:					Well Number
SPL	JR ENE	RGY PA	RTNER	S LLC		SHE	LBY 2	23					4H
L						I				•			KZ 06/29/2018

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy, Minerals and Natural Resource REGENED

Submit Original to Appropriate District Office

Oil Conservation Division JAN 2 1 2020 1220 South St. Francis Dr.

Santa Fe, NM 8 NNRD-OCD ARTESIA

GAS CAPTURE PLAN

Date: 0 <u>1/07/2020</u>		
☑ Original☐ Amended - Reason for Amendment:	Operator & OGRID No.	: SPUR ENERGY PARTNERS LLC (328947)
This Gas Capture Plan outlines actions to b		educe well/production facility flaring/venting fo

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility - Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
SHELBY 23 2H	30-015-Pending	B-26-19S-25E	1246'FNL 1961'FEL	600 mcf/day	Flared	Will flare until gathering line tie-in
SHELBY 23 3H	30-015-Pending	B-26-19S-25E	1235' FNL 1944' FEL	600 mcf/day	Flared	Will flare until gathering line tie-in
SHELBY 23 4H	30-015-Pending	A-26-19S-25E	858' FNL 718' FEL	600 mcf/day	Flared	Will flare until gathering line tie-in
SHELBY 23 5H	30-015-Pending	A-26-19S-25E	847' FNL 702' FEL	600 mcf/day	Flared	Will flare until gathering line tie-in
SHELBY 23 6H	30-015-Pending	A-26-19S-25E	836' FNL 685 'FEL	600 mcf/day	Flared	Will flare until gathering line tie-in

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated <u>DCP Operating Company</u>, <u>LP</u> and will be connected to <u>DCP's low</u>/high pressure gathering system located in <u>Eddy</u> County, New Mexico. It will require <u>1,100'</u> of pipeline to connect the facility to low/high pressure gathering system. <u>Spur Energy Partners LLC</u> provides (periodically) to <u>DCP</u> a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <u>Spur Energy Partners LLC</u> and <u>DCP</u> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <u>DCP's</u> Processing Plant located in Sec. <u>36</u>, Twn. <u>19S</u>, Rng. <u>24E</u>, <u>Eddy</u> County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on <u>DCP's</u> system at that time. Based on current information, it is <u>Spur Energy Partners LLC's</u> belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

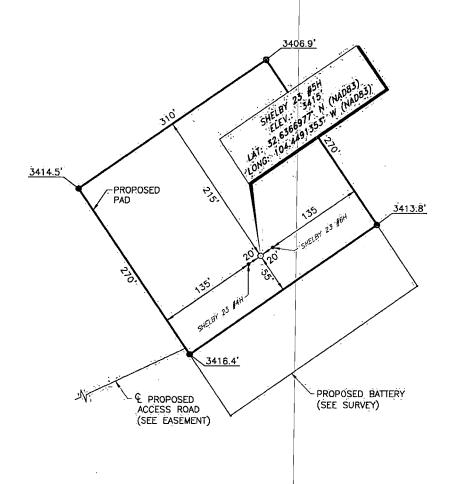
Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease

NGL R	emoval – On lease Plants are expensive, residue gas is still flared, and unec	onomical to operate when one volume dealines
O	riants are expensive, residue gas is sun mareu, and unec	onomical to operate when gas volume decimes
	•	
3		
		T. Control of the Con

SPUR ENERGY PARTNERS LLC SHELBY 23 #5H SITE PLAN (847' FNL & 702' FEL) SECTION 26, T19S, R25E N. M. P. M., EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

From the intersection of CR-23 (Rock Daisy Rd.) and CR-29 (Crossbuck Rd.);

Co East on CR-23 approx. 3.2 miles to a lease road on the left.

Turn left and go North approx. 1.3 miles to a proposed road on the left,

Turn left and go Northeast approx. 467 feet to location on the left.



BEARINGS ARE GRID NAD 83 NN EAST DISTANCES ARE HORIZ, GROUND

NO.	REVISION	DATE					
JOB NO.: LS19121147							
DWC	NO: 19121	147-4					



701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

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SCALE: 1" = 100'

DATE: 12-11-2019 SURVEYED BY: JF/EF DRAWN BY: KAKN APPROVED BY: RMH

SHEET: 1 OF 1

1. Geologic Formations

TVD of target	2675'	Pilot Hole Depth	N/A
MD at TD:	8517'	Deepest Expected fresh water:	397'

Delaware Basin

Formation	TVD - RKB	Expected Fluids
San Andres Upper	810	Losses
San Andres Middle	1,105	Losses
San Andres Lower	1,790	Losses
Glorieta Top	2,385	Oil/Gas
Upper Paddock	2,525	Oil/Gas
Lower Paddock 1	2,685	·Oil/Gas
Lower Paddock 2	2,795	Oil/Gas
Lower Paddock 3	2915	Oil/Gas

^{*}H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program

									Buoyant	Buoyant
Hole Sizé (in)	Casing	Intervál ,	Ćsg. Size	Weight	Circle	Cold	ŠF	OF D	Body SF	Joint SF
Hole Size (in)	From (ft)	To (ft)	(in)	(lbs)**	Grade	Conn.	<u>Collapse</u>	SF Burst	Tension .	Tension.
12.25	0	1200	9.625	36	J-55	BTC	1.125	1.2	1.4	1.4
8.75	0	2973	7	32	L-80	LTC	1.125	1.2	1.4	1.4
8.75	2973	8517	5.5	20	L-80	BK-HT	1.125	1.2	1.4	1.4

	Y,or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	. Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	N/A
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	11
In yes, does production easing cement the back a minimum of 30 above the Reel?	.=.
Is well within the designated 4 string boundary.	havan Andreas and a same
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
I III / I' D 111 D 100D40	**************************************
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?	Y
If yes, are there two strings cemented to surface?	Y
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
	MALE ELLE
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Casing String	# Sks	-W.t. (1b/gal) ∦	Yld (ft3/sack)	H20\$	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	. 380	12.8	1.65	8.19	10:25	35/65 Poz C
Surface (Tail)	170	14.8	1.33	6.32	6:40	Class C Cement, Accelerator
Production (Lead)	265	11.5	2.63	9.7	N/A	50/50 Poz C
Production (Tail)	1225	14.2	1.38	6.686	N/A	50/50 Poz C

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface (Lead)	0	950	100%
Surface (Tail)	950	1200	165%
Production (Lead)	0	1640	0%
Production (Tail)	1640	8517	50%

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Туре			Tested to:
		3M	Annular		✓	70% of working pressure
12.25" Hole	13-5/8"		Blind Ram		✓	•
12.23 Hole	13-3/8	3M .	Pipe Ram			250: / 2000:
			Double Ran	n	✓	250 psi / 3000 psi
			Other*			
		3M	Annular		✓	70% of working pressure
8.75" Hole	13-5/8"		Blind Ram		✓	
6.75 Hole	13-5/8*	21/4	Pipe Ram			250 ms; / 2000 ms;
		3M	Double Ram		✓	250 psi / 3000 psi
			Other*			

^{*}Specify if additional ram is utilized.

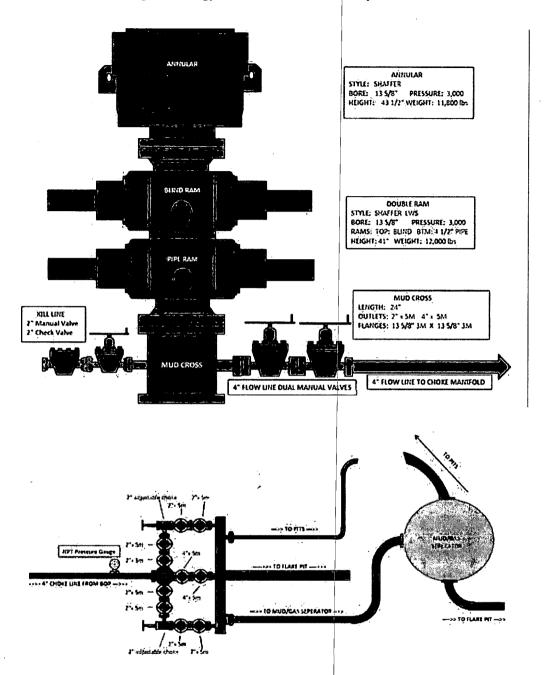
Spur will utilize a 5M annular with a 5M BOPE stack. The BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in 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.

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.

Y Are anchors required by manufacturer?

A multibowl or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. 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. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015. See attached schematics.



The buffer tank and panic line will not be connected at any point during drilling operations.

Required safety valves, with appropriate wrenches and subs for the drill string being utilized, will be in the open position and accessible on the rig floor.

5. Mud Program

De From (ft)	pth To (ft)	Туре	Weight (ppg)	Viscosity	Water Loss
.0	1200	Water-Based Mud	8.6 8.9	32-36	N/C
1200	8517	Water-Based Mud	8.6-8.9	32-36	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Spur will use a closed mud system.

		
13371 . 4 1111 1 1 4 14	1	DATE AND TO A VALUE AND A COLUMN
I what will be used to monitor the	e loss or gain of fluid? L	PVT/MD Totco/Visual Monitoring
The state of the state of the state of the	Tobb of Sam of Haid.	1 V 1/1/12 Totoo, V isaar iviointoring

6. Logging and Testing Procedures

. Logg	ing, Coring and Testing											
Yes			vertical portion of hole). Stated logs									
	run will be in the Comp	run will be in the Completion Report and submitted to the BLM.										
No	Logs are planned based	Logs are planned based on well control or offset log information.										
No	Drill stem test? If yes, e	explain										
No	Coring? If yes, explain											
Addi	tional logs planned	Interval										
No	Resistivity											
No	Density											
No	CBL											
Yes	Mud log	SCP - TD										
No	PEX											

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	1238 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	102°F

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

Hyc	drogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If
H25	S is detected in concentrations greater than 100 ppm, the operator will comply with the
	visions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured
	ues and formations will be provided to the BLM.
N	H2S is present
Y	H2S Plan attached

8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe.	Yes
• We plan to drill the two well pad in batch by section: all surface sections,	
and production sections. The wellhead will be secured with a night cap	
whenever the rig is not over the well.	
Will more than one drilling rig be used for drilling operations? If yes, describe.	No

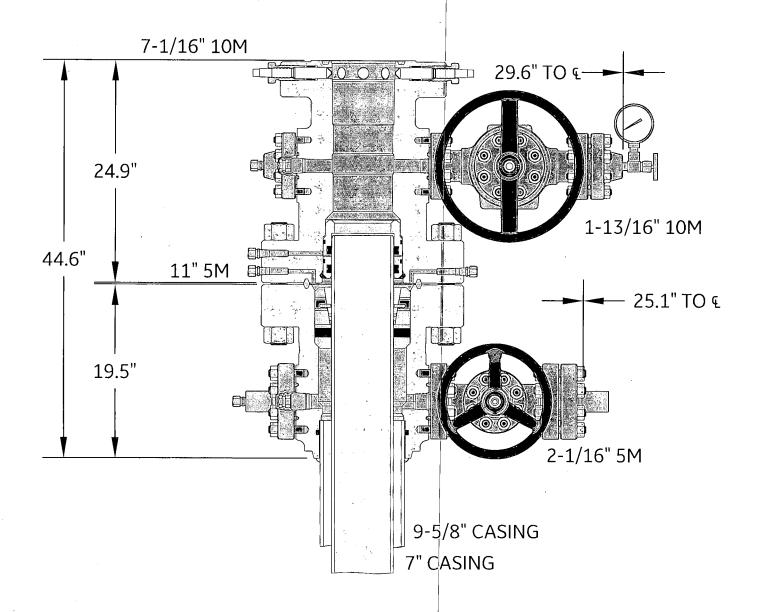
Total estimated cuttings volume: 808.4 bbls.

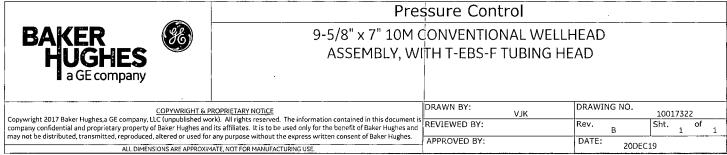
Attachments

- _x__ Directional Plan
- _x__ H2S Contingency Plan
- _x__ Rig Attachments
- _x__ Premium Connection Specs

9. Company Personnel

Name	<u>Title</u>	Office Phone	Mobile Phone
Christopher Hollis	Drilling Manager	832-930-8629	713-380-7754







Keeping You Connected.

Precision Connections BK-HT 5.5 in. 20 lb/ft L-80 with 6.3 in. Coupling OD



Pipe Body			Connection		
Nominal OD	5.500	inches	Coupling OD	6.300	inches
Nominal Weight	20.00	lb/ft	Coupling Length	8.250	inches
Wall Thickness	0.361	inches	Make Up Loss	4.125	inches
Plain End Weight	19.81	lb/ft	Critical Section Area	8.456	in²
Drift	4.653	inches	Internal Pressure Rating	100%	
Nominal ID	4.778	inches	External Pressure Rating	100%	
Grade	L-80		Tension-Efficiency	100%_	
Min Yield	80,000	lbf/in²	Connection Strength	466	kips
Min Tensile	95,000	lbf/in²	Compression Efficiency	100%	•
Critical Section Area	5.828	in²	Uniaxial Bend Rating	58.2	° / 100 ft
Pipe Body Yield Strength	466	kips	Min Make Up Torque	6,050	ft-lbs
Min Internal Yield Pressure	9,190	psi	Yield Torque	23,250	ft-lbs
Collapse Pressure	8,830	psi		v1.2	7/2//2010
				V I . Z	7/26/2018

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Keeping You Connected.

SEMI

7/26/2018

Torque Data Sheet - Precision Connections BK-HT

5.5 in. 20 lb/ft L-80 with 6.3 in. Coupling OD

Min Make Up Torque

ft-lbs 6,050

Max Operating Torque

19,800 ft-lbs

Max Make Up Torque

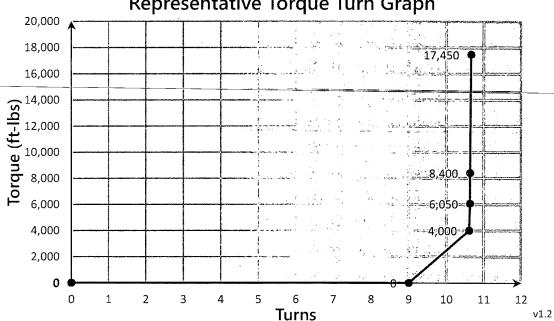
17,450 ft-lbs Yield Torque

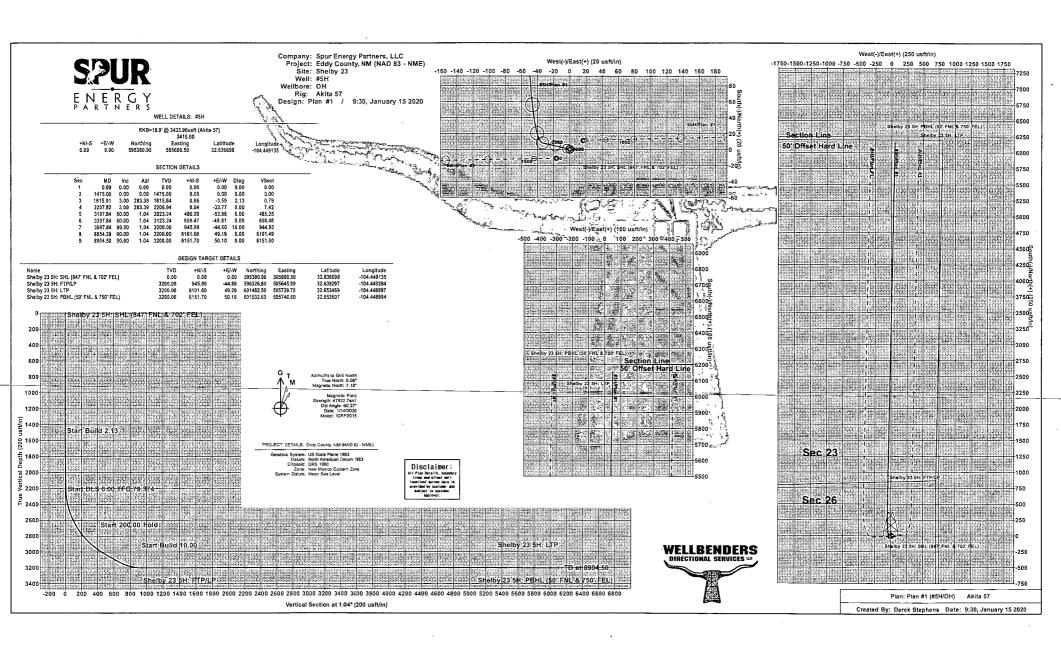
23,250 ft-lbs

Optimum Torque

ft-lbs 8,400

Representative Torque Turn Graph







Spur Energy Partners, LLC

Eddy County, NM (NAD 83 - NME) Shelby 23 #5H OH

Plan: Plan #1

Standard Plan With Toolface

15 January, 2020

PECEIVED

JAN 2 1 2020

EMNRD-OCD ARTESIA



Standard Plan With Toolface

Company: Spur Energy Partners, LLC Project: Eddy County, NM (NAD 83 - NME) Site: Shelby 23 Well: #5H Wellbore: OH Design: Plan #1		Local Co-ordinate Re TVD Reference: MD Reference: North Reference: Survey Calculation M Database:	RKB=18.9' @ 3433.90usft (Akita RKB=18.9' @ 3433.90usft (Akita Grid	
Project Eddy County, NM (NAD 83 - NME)				
Map System: US State Plane 1983 Geo Datum: North American Datum 1983 Map Zone: New Mexico Eastern Zone		System Datum:	Mean Sea Level	
Site Shelby 23				
Site Position: From: Map Position Uncertainty: 0.00 usft	Northing: Easting: Slot Radius:	594,944.60 usft 504,431.00 usft 13.200 in	Latitude: Longitude: Grid Convergence:	32.635495 -104.453225 -0.065 °
Well #5H				
Well Position +N/-S 0.00 usft +E/-W 0.00 usft Position Uncertainty 0.00 usft	Northing: Easting: Wellhead Elevation:	595,380.90 usft 505,690.50 usft usft	Latitude: Longitude: Ground Level:	32.636698 -104.449135 3,415.00 usft
Wellbore OH				
Magnetics Model Name Sample Date IGRF2015 1/14/2020	Declination (°)	Dip Angle (°) Field Strer (nT) 2 60.268 47,822.7		
Design Plan #1				
Audit Notes: Version: Phase:	PLAN Tie On Dep	th: 0.00		
Vertical Section: Depth From (TVD) (usft) 0.00	PLAN Tie On Dep +N/-S +E/-W (usft) (usft) 0.00 0.00	Direction (°)		
Survey Tool Program Date 1/15/2020				
From To (usft) Survey (Wellbore)	Tool Name	Description		
0.00 8,904.50 Plan #1 (OH)	MWD+IGRF	OWSG MWD + IGRF or WMM		



Standard Plan With Toolface

Company:

Spur Energy Partners, LLC

Eddy County, NM (NAD 83 - NME)

Project: Site: Well:

Shelby 23 #5H

Wellbore: OH

Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Database:

Well #5H

RKB=18.9' @ 3433.90usft (Akita 57) RKB=18.9' @ 3433.90usft (Akita 57)

Grid

Minimum Curvature

WBDS_SQL_2

Des	igit.	lan #1			<u> </u>			Database:	· · · · · · · · · · · · · · · · · · ·	WBDS_SQL_2		
Plar	ned Survey		14.			and the second s	o or the second				The second secon	
3 A.	MD (usft)	Inc (°)		Azi (azimuth)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	*TFace
	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
	100.00		0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
	200.00		0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
	300.00		0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
	400.00		0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
	500.00		0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
	600.00		0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
	700.00		0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
	800.00		0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
	900.00		0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
-	1,000.00		0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
	1,100.00		0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
	1,200.00		0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	-0.00	-0.000-
	1,300.00		0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
	1,400.00		0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
	1,475.00		0.00	0.00	1,475.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
	1,500.00		0.53	283.39	1,500.00	0.03	-0.11	0.02	2.13	2.13	0.00	283.389
	1,600.00		2.66	283.39	1,599.95	0.67	-2.83	0.62	2.13	2.13	0.00	0.000
	1,615.91		3.00	283.39	1,615.84	0.86	-3.59	0.79	2.13	2.13	0.00	0.000
	1,700.00		3.00	283.39	1,699.82	1.88	-7.88	1.73	0.00	0.00	0.00	0.000
	1,800.00		3.00	283.39	1,799.68	3.09	-12.98	2.85	0.00	0.00	0.00	0.000
	1,900.00		3.00	283.39	1,899.55	4.30	-18.08	3.97	0.00	0.00	0.00	0.000
	2,000.00		3.00	283.39	1,999.41	5.52	-23.18	5.09	0.00	0.00	0.00	0.000
	2,100.00		3.00	283.39	2,099.27	6.73	-28.27	6.22	0.00	0.00	0.00	0.000
	2,207.82		3.00	283.39	2,206.94	8.04	-33.77	7.42	0.00	0.00	0.00	0.000
	2,250.00		4.27	319.05	2,249.04	9.48	-35.87	8.83	6.00	3.00	84.54	79.374
	2,300.00		6.76	336.96	2,298.81	13.60	-38.25	12.90	6.00	4.98	35.82	43.779



Standard Plan With Toolface

Company:

Eddy County, NM (NAD 83 - NME)

Project: Site: Well: Wellbore:

Shelby 23 #5H ОН

Spur Energy Partners, LLC

TVD Reference: MD Reference:

Local Co-ordinate Reference:

North Reference: Survey Calculation Method: Well #5H

RKB=18.9' @ 3433.90usft (Akita 57) RKB=18.9' @ 3433.90usft (Akita 57)

Grid

Minimum Curvature

Design: Plan #1						Database:	ion wethou.	WBDS_SQL_2		7
Planned Survey			ALLEGARIA - T. A. L. Marie and Marie	The second of th		and the second s	and the second s	Addresses - Leader (Section) of the Section (Control of the Section) of the Section (Control of the Se		-,
on the state of the second of	nc (°)	Azi (azimuth)	TVD (üsft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace
2,350.00	9.55	344.89	2,348.30	20.31	-40.48	19.57	6.00	5.58	15.87	25.944
2,400.00	12.44	349.22	2,397.38	29.60	-42.57	28.83	6.00	5.77	8.66	18.089
2,450.00	15.37	351.93	2,445.91	41.45	-44.51	40.64	6.00	5.86	5.42	13.839
2,500.00	18.32	353.79	2,493.76	55.83	-46.29	54.98	6.00	5.90	3.71	11.209
2,550.00	21.28	355.14	2,540.80	72.68	-47.91	71.80	6.00	5.93	2.71	9.433
2,600.00	24.26	356.18	2,586.90	91.98	-49.36	91.06	6.00	5.95	2.07	8.159
2,650.00	27.23	357.00	2,631.93	113.65	-50.64	112.71	6.00	5.96	1.64	7,203
2,700.00	30.22	357.67	2,675.77	137.65	-51.76	136.69	6.00	5.97	1.34	6.463
2,750.00	33.20	358.23	2,718.30	163.91	-52.69	162.93	6.00	5.97	1.12	5.874
2,800.00	36.19	358.71	2,759.41	192.36	-53.45	191.36	6.00	5.98	0.96	5.397
2,850.00	39.18	359.12	2,798.97	222.92	-54.02	221.90	6.00	5.98	0.83	5.005
2,900.00	42.17	359.48	2,836.89	255.50	-54.42	254.47	6.00	5.98	0.73	4.677
2,950.00	45.16	359.81	2,873.06	290.02	-54.63	288.98	6.00	5.98	0.65	-4.400
3,000.00	48.15	0.10	2,907.37	326.38	-54.66	325.33	6.00	5.98	0.58	4.166
3,050.00	51.15	0.37	2,939.74	364.48	-54.50	363.43	6.00	5.99	0.53	3.965
3,100.00	54.14	0.61	2,970.07	404.22	- 54.16	403.17	6.00	5.99	0.49	3.792
3,150.00	57.13	0.84	2,998.29	445.48	-53.63	444.43	6.00	5.99	0.45	3.644
3,197.84	60.00	1.04	3,023.24	486.29	-52.96	485.25	6.00	5.99	0.42	3.516
3,200.00	60.00	1.04	3,024.32	488.16	-52.93	487.12	0.00	0.00	0.00	0.000
3,300.00	60.00	1.04	3,074.32	574.75	-51.35	573.72	0.00	0.00	0.00	0.000
3,397.84	60.00	1.04	3,123.24	659.47	-49.81	658.46	0.00	0.00	0.00	0.000
3,400.00	60.22	1.04	3,124.31	661.34	-49.78	660.33	10.00	. 10.00	0.00	0.000
3,450.00	65.22	1.04	3,147.23	705.76	-48.97	704.75	10.00	10.00	0.00	0.000
3,500.00	70.22	1.04	3,166.18	752.00	-48.13	751.00	10.00	10.00	0.00	0.000
3,550.00	75.22	1.04	3,181.03	799.72	-47.26	798.73	10.00	10.00	0.00	0.000
3,600.00	80.22	1.04	3,191.67	848.55	-46.37	847.57	10.00	10.00	0.00	0.000
3,650.00	85.22	1.04	3,198.00	898.12	-45.47	897.15	10.00	10.00	0.00	0.000



Standard Plan With Toolface

Company: Spur E

Spur Enérgy Partners, LLC

Eddy County, NM (NAD 83 - NME)

Project: Site:

Shelby 23 #5H

Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference: Survey Calculation Method:

Database:

Well #5H

RKB=18.9' @ 3433.90usft (Akita 57) RKB=18.9' @ 3433.90usft (Akita 57)

Grid

Minimum Curvature

WBDS_SQL_2

Desi	n: Plan #1			<u></u> j			Database:	sit in a g	WBDS_SQL_2		
Plán	ned Survey										
	MD	inc Az	i (azimuth)	TVD	N/S	E/W	V. Sec	DLeg	Build	Turn	TFace
A*	MD (usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)
	3,697.84	90.00	1.04	3,200.00	945.90	-44.60	944.93	10.00	10.00	0.00	0.000
	3,700.00	90.00	1.04	3,200.00	948.06	-44.56	947.09	0.00	0.00	0.00	0.000
	3,800.00	90.00	1.04	3,200.00	1,048.04	-42.74	1,047.09	0.00	0.00	0.00	0.000
	3,900.00	90.00	1.04	3,200.00	1,148.03	-40.92	1,147.09	0.00	0.00	0.00	0.000
	4,000.00	90.00	1.04	3,200.00	1,248.01	-39.10	1,247.09	0.00	0.00	0.00	0.000
	4,100.00	90.00	1.04	3,200.00	1,347.99	-37.29	1,347.09	0.00	0.00	0.00	0.000
	4,200.00	90.00	1.04	3,200.00	1,447.98	-35.47	1,447.09	0.00	0.00	0.00	0.000
	4,300.00	90.00	1.04	3,200.00	1,547.96	-33.65	1,547.09	0.00	0.00	0.00	0.000
	4,400.00	90.00	1.04	3,200.00	1,647.94	-31.83	1,647.09	0.00	0.00	0.00	0.000
	4,500.00	90.00	1.04	3,200.00	1,747.93	-30.01	1,747.09	0.00	0.00	0.00	0.000
	4,600.00	90.00	1.04	3,200.00	1,847.91	-28.19	1,847.09	0.00	0.00	0.00	0.000
- -	4,700,00	90.00	1.04	3,200.00	1,947.89	-26.37	1,947.09	0.00	0.00	0.00	0.000
	4,800.00	90.00	1.04	3,200.00	2,047.88	-24.55	2,047.09	0.00	0.00	0.00	0.000
	4,900.00	90.00	1.04	3,200.00	2,147.86	-22.73	2,147.09	0.00	0.00	0.00	0.000
	5,000.00	90.00	1.04	3,200.00	2,247.84	-20.92	2,247.09	0.00	0.00	0.00	0.000
	5,100.00	90.00	1.04	3,200.00	2,347.83	-19.10	2,347.09	0.00	0.00	0.00	0.000
	5,200.00	90.00	1.04	3,200.00	2,447.81	-17.28	2,447.09	0.00	0.00	0.00	0.000
	5,300.00	90.00	1.04	3,200.00	2,547.79	-15.46	2,547.09	0.00	0.00	0.00	0.000
	5,400.00	90.00	1.04	3,200.00	2,647.78	-13.64	2,647.09	0.00	0.00	0.00	0.000
	5,500.00	90.00	1.04	3,200.00	2,747.76	-11.82	2,747.09	0.00	0.00	0.00	0.000
	5,600.00	90.00	1.04	3,200.00	2,847.74	-10.00	2,847.09	0.00	0.00	0.00	0.000
	5,700.00	90.00	1.04	3,200.00	2,947.73	-8.18	2,947.09	0.00	0.00	0.00	0.000
	5,800.00	90.00	1.04	3,200.00	3,047.71	-6.37	3,047.09	0.00	0.00	0.00	0.000
1	5,900.00	90.00	1.04	3,200.00	3,147.69	-4.55	3,147.09	0.00	0.00	0.00	0.000
	6,000.00	90.00	1.04	3,200.00	3,247.68	-2.73	3,247.09	0.00	0.00	0.00	0.000
	6,100.00	90.00	1.04	3,200.00	3,347.66	-0.91	3,347.09	0.00	0.00	0.00	0.000
	6,200.00	90.00	1.04	3,200.00	3,447.65	0.91	3,447.09	0.00	0.00	0.00	0.000



Standard Plan With Toolface

Spur Energy Partners, LLC Company: Project:

Eddy County, NM (NAD 83 - NME)

Site: Well: Wellbore:

Design:

Shelby 23 #5H

ОН Plan #1 Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Database:

Well #5H

RKB=18.9' @ 3433.90usft (Akita 57) RKB=18.9' @ 3433.90usft (Akita 57)

Minimum Curvature WBDS SQL 2

гіан	ned Su	ivey

MD		(azimuth)	TVD	`*N/S	E/W	V. Sec	DLeg	Build.	Turn :	TFace
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)
6,300.00	90.00	1.04	3,200.00	3,547.63	2.73	3,547.09	0.00	0.00	0.00	0.000
6,400.00	90.00	1.04	3,200.00	3,647.61	4.55	3,647.09	0.00	0.00	0.00	0.000
6,500.00	90.00	1.04	3,200.00	3,747.60	6.37	3,747.09	. 0.00	0.00	0.00	0.000
6,600.00	90.00	1.04	3,200.00	3,847.58	8.19	3,847.09	0.00	0.00	0.00	0.000
6,700.00	90.00	1.04	3,200.00	3,947.56	10.00	3,947.09	0.00	0.00	0.00	0.000
6,800.00	90.00	1.04	3,200.00	4,047.55	11.82	4,047.09	0.00	0.00	0.00	0.000
6,900.00	90.00	1.04	3,200.00	4,147.53	13.64	4,147.09	0.00	0.00	0.00	0.000
7,000.00	90.00	1.04	3,200.00	4,247.51	15.46	4,247.09	0.00	0.00	0.00	0.000
7,100.00	90.00	1.04	3,200.00	4,347.50	17.28	4,347.09	0.00	0.00	0.00	0.000
7,200.00	90.00	1.04	3,200.00	4,447.48	19.10	4,447.09	0.00	0.00	0.00	0.000
7,300.00	90.00	1.04	3,200.00	4,547.46	20.92	4,547.09	0.00	0.00	0.00	0.000
7,400.00	90.00	1.04	3,200.00	4,647.45	22.74	4,647.09	0.00	0.00	0.00	0.000
7,500.00	90.00	1.04	3,200.00	4,747.43	24.55	4,747.09	0:00	-0.00	0.00	0.000
7,600.00	90.00	1.04	3,200.00	4,847.41	26.37	4,847.09	0.00	0.00	0.00	0.000
7,700.00	90.00	1.04	3,200.00	4,947.40	28.19	4,947.09	0.00	0.00	0.00	0.000
7,800.00	90.00	1.04	3,200.00	5,047.38	30.01	5,047.09	0.00	0.00	0.00	0.000
7,900.00	90.00	1.04	3,200.00	5,147.36	31.83	5,147.09	0.00	0.00	0.00	0.000
8,000.00	90.00	1.04	3,200.00	5,247.35	33.65	5,247.09	0.00	0.00	0.00	0.000
8,100.00	90.00	1.04	3,200.00	5,347.33	35.47	5,347.09	0.00	0.00	0.00	0.000
8,200.00	90.00	1.04	3,200.00	5,447.31	37.29	5,447.09	0.00	0.00	0.00	0.000
8,300.00	90.00	1.04	3,200.00	5,547.30	39.11	5,547.09	0.00	0.00	0.00	0.000
8,400.00	90.00	1.04	3,200.00	5,647.28	40.92	5,647.09	0.00	0.00	0.00	0.000
8,500.00	90.00	1.04	3,200.00	5,747.26	42.74	5,747.09	0.00	0.00	0.00	0.000
8,600.00	90.00	1.04	3,200.00	5,847.25	44.56	5,847.09	0.00	0.00	0.00	0.000
8,700.00	90.00	1.04	3,200.00	5,947.23	46.38	5,947.09	0.00	0.00	0.00	0.000
8,800.00	90.00	1.04	3,200.00	6,047.22	48.20	6,047.09	0.00	0.00	0.00	0.000
8,854.39	90.00	1.04	3,200.00	6,101.60	49.19	6,101.49	0.00	0.00	0.00	0.000

SPUR ENERGY

Wellbenders

Standard Plan With Toolface

Company: Project: Site: Well: Wellbore: Design:	Spur Energy Partners, L Eddy County, NM (NAD Shelby 23 #5H OH Plan #1	,				Local Co-ordinate TVD Reference: MD Reference: North Reference: Survey Calculatio Database:		Well #5H RKB=18.9' @ 3433. RKB=18.9' @ 3433. Grid Minimum Curvature WBDS_SQL_2	90usft (Akita 57)	
Planned Survey MD (usft)		Azi (azimuth)	TVD (usft)	N/S (usft)	E/W (usft)	V: Sec (usft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
8,904.	50 90.00	1.04	3,200.00	6,151.70	50.10	6,151.60	0.00	0.00	0.00	0.000
Checked By:				Approved By:				Date:		



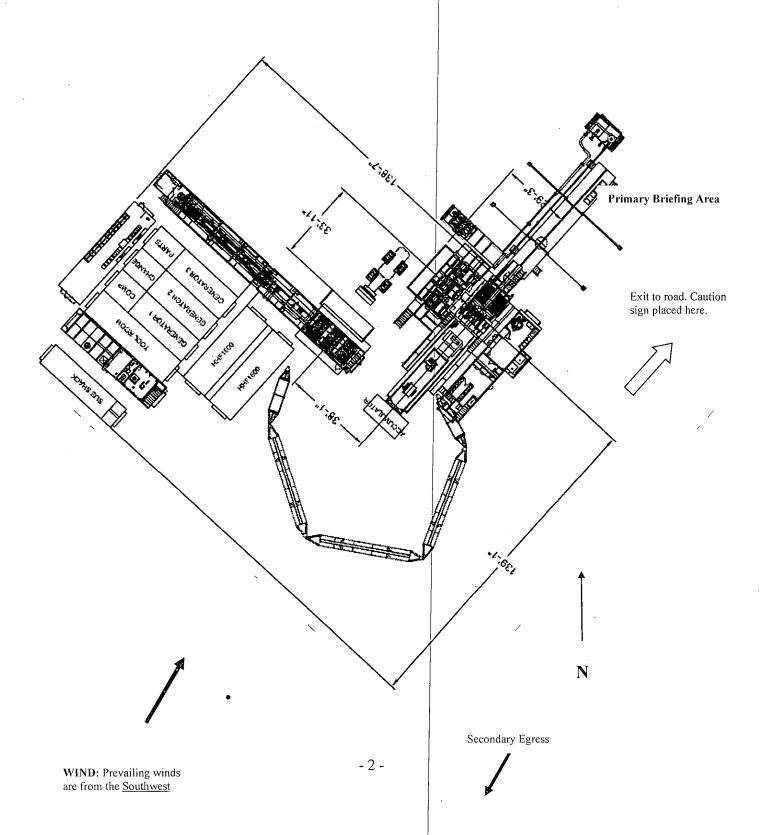
Permian Drilling Hydrogen Sulfide Drilling Operations Plan Shelby 23 5H

Open drill site. No homes or buildings are near the proposed location.

1. Escape

Personnel shall escape upwind of wellbore in the event of an emergency gas release. Escape can take place through the lease road on the Southeast side of the location. Personnel need to move to a safe distance and block the entrance to location. If the primary route is not an option due to the wind direction, then a secondary egress route should be taken.

Secondary Briefing Area





Hydrogen Sulfide (H2S)
Contingency Plan

For

Spur Energy Partners
New Mexico Operations

Spur Energy Partners New Mexico Operations Hydrogen Sulfide Operation Plan

Introduction:

H2S is a toxic, poisonous gas that could cause death or injury. The objective of this contingency plan is to provide an organized plan of action for alerting and protecting the public from H2S exposure in the event a potentially hazardous volume is accidentally released to the atmosphere. This plan should be activated immediately if any such release occurs. The Superintendent is responsible for initiating and carrying out the plan.

Characteristics of H2S and SO2:

Common Name	Chemical Formula	Specific Gravity	Threshold Limit		ardous imit	Lethal Concentration
Hydrogen Sulfide	H2S	1.189 Air= 1	10 ppm	100	ppm/hr	600 ppm
Sulfur Dioxide	S02	2.21 Air= 1	2 ppm	N/A		1000 ppm

Scope:

This contingency plan provides an organized plan of action for alerting and protecting the public within an area of exposure prior to an intentional release, or following the accidental release of a potentially hazardous volume of hydrogen sulfide. The plan establishes guidelines for all personnel whose work activity may involve exposure to Hydrogen Sulfide Gas (H₂S).

Objective:

Prevent any and all accidents, and prevent the uncontrolled release of H₂S into the atmosphere. Provide proper evacuation procedures to cope with emergencies.

Provide immediate and adequate medical attention should an injury occur.

H₂STraining

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- 1. The hazards and characteristics of hydrogen sulfide (H2S)
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- 4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H₂S metal components. If high tensile tubular are to be used, personnel will be trained in their special maintenance requirements.

- 2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- 3. The contents and requirements of the H₂S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan.

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H2S.

Well Control Equipment

- A. Flare Line installed
- B. Choke Manifold
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
- D. Auxiliary equipment may include if applicable: annular preventer and rotating head

Protective equipment for essential personnel:

30-minute SCBA units located in the doghouse and at briefing areas, as indicated on well site diagram. As it may be difficult to communicate audibly while wearing these units, hand signals shall be utilized.

H2S detection and monitoring equipment:

Portable H2S monitors positioned on location for best coverage and response. These unites have warning lights and audible sirens when H2S levels of 20 PPM are reached. These units are usually capable of detecting SO₂, which is a byproduct of burning H2S.

Visual warning systems:

- A. Wind direction indicators as shown on well site diagram
- B. Caution/ Danger signs shall be posted on roads providing direct access to locations Signs will be painted a high visibility yellow with black lettering of sufficient size to be reasonable distance from the immediate location. Bilingual signs will be used when appropriate.

Mud program:

The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight, safe drilling practices and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold lines, and valves shall be H2S trim.
- B. All elastomers used for packing and seals shall be H2S trim.

Communication:

- A. Radio communications in company vehicles including cellular telephones and 2-way radio
- B. Land line (telephone) communications at Office

Well testing:

- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safety and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H2S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

Emergency Procedures

Assumed 100 ppm Radius Of Exposure (ROE) = 3000'
100 ppm H2S concentration shall trigger activation of this plan.

In the event of a release of gas containing H2S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H2S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
 - o Detection of H2S, and
 - Measures for protection against the gas.
 - o Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (S02). Intentional ignition must be

coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Contacting Authorities

Company personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Spur Energy Partners response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER).

Spur Energy Partners Company Call List	
Superintendent - Jerry Mathews	575-748-5234
Engineer – Michael Sliva	281-723-1473
Vice President Oper Todd Mucha	832-930-8515
HSE Manager – Mike Schoch	713-816-6350
Lea County Agency Call List - (575)	
Hobbs	
State Police	392-5588
City Police	397-9265
Sheriff's Office	393-2515
Ambulance	911
Fire Department	397-9308
LEPC (Local Emergency Planning Committee)	393-2870
NMOCD	393-6161
US Bureau of Land Management	393-3612
Eddy County Agency Call List - (575)	
Carlsbad	
State Police	885-3137
City Police	885-2111
Sheriff's Office	887-7551
Ambulance	911
Fire Department	. 885-2111
LEPC (Local Emergency Planning Committee	887-3798
US Bureau of Land Management	887-6544
NM Emergency Response Commission (Santa	Fe). (505) 476-9600
24 HR	(505) 827-9126
National Emergency Response Center (Washington, DC) (800) 424-8802
Emergency Services	
Hungry Hock Environmental	(575)-393-3386
Flight For Life - Lubbock, TX	(806) 743-9911
Aerocare - Lubbock, TX	(806) 747-8923
Med Flight Air Amb - Albuquerque, NM	(575) 842-4433
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