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District I 1625 N French Dr., Phone (575) 393-61 District II		393-0720		Energy Minera	te of New Mexico Revised Decem Revised Decem						
811 S First St, Arte Phone (575) 748-12		48-9720	HOBBS OCD	Oil Con	servation D	ivision			Permit		
District III 1000 Rto Brazos Ro. Dhana (505) 224 (11)	id, Aztec, NM	87410	JL 0 5 2012	1220 Sou	ith St. Frai	cis Dr.					
District IV 1220 S St Francis D				Santa	1 Fe, NM 87	505					
	Phone (505) 476-3460 Fax (505) 476-3462										
APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE											
	¹ Operator Name and Address ² OGRID Number										
Fasken Oil and Ranch, Ltd. 151416 303 W. Wall St., Ste. 1800, Midland, TX 79701 701											
				Property l			130.00	25-	40680		
323	42			Laguna 16 S					2H		
			-	⁷ Surfac	e Locatio	n					
UL - Lot	Section	Township	Range	Lot Idn Feet f	rom N	/S Line	Feet From	E/W Lin	e County		
Р	16	20S	32E	475	' So	ıth	610'	East	Lea		
			•	^{· 8} Pool I	nformatio	n			· · · · · · · · · · · · · · · · · · ·		
Salt La	ke; Bo	one Sp	ring						53560		
				Additional W							
9 Work 1 N	Гуре		¹⁰ Well Type O	Cable/F R	Rotary	12	Lease Type S	13	Ground Level Elevation		
14 Multi			¹⁵ Proposed Depth			Desser	⁷ Contractor		¹⁸ Spud Date 7 16 2012		
No Depth to Ground		3,950		5 TVD Bone S	Spring well	Precis	Distance t	o nearest sur	7-16-2012 face water		
			19	Proposed Casing	and Com	ent Proc					
Tume	Hole S		Casing Size	Casing Weight/ft		g Depth	Sacks of C	ement	Estimated TOC		
Type Surface	26		20	133	105		1250 "C"		Surface		
Salt Prot				54.65 & 61					Surface		
Inter Prod	12 1	/4" 9	9 5/8" 5 1/2"	36 & 40 17	460		1250 HLC 2550 Ver		Surface 4000'Calc.		
		+	5 1/2		15,95	0	& Lite	Sacem	4000 Care.		
L		_	Casin	g/Cement Progra	m: Addit	ional Co	mments				
· · ·		<u></u>	F	Proposed Blowout	Preventi	on Progr	am_	Voore	From Approval		
	Туре			Vorking Pressure	1	Test Press	HE LEXPIPES	Drillin	guinderway		
Annu	lar		5	000		1 5000	Date Unico		Schaffer		
	leram		I	000		5000			Schaffer		
I hereby certify	that the inf			and complete to the best	····						
of my knowledg			t will be construct	ted according to		OIL CO	ONSERVAT	ION DIV	VISION		
NMOCD guide	elines 🔲, a	general p		attached) alternative	Approved By	· · · · · · · · · · · · · · · · · · ·					
UCD-approved	i pian 🛄.	attac		с тррт.	,		ah/				
Signature	lim	2 Jum	<u>n</u>			\mathbb{Z}	fails	Ę			
Punted name Kim Tyson Tute.											
Title.	Regula	atoŗy	Analyst		Approved Da	9L /2	2012 Ex	piration Dat	UUL 12 2014		
E-mail Address	kimt(@forl.	.com			/			¢ - ¥		
Date 7-3-2	2012		Phone. 432	-687-1777	Conditions of	Approval Att	ached				



Penetration Piont - 975' FSL & 380' FEL, 10,030' MD & 9700' TVD



HOBBS OCD

JUL 0 5 2012

; RECEIVED

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FASKEN OIL AND RANCH, LTD.

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303 W. WALL AVE.

SUITE 1800

MIDLAND, TEXAS 79701-5116

CONTINGENCY PLAN FOR HYDROGEN SULFIDE DISCHARGE

DRILLING OPERATIONS

CONTINGENCY PLAN FOR HYDROGEN SULFIDE DISCHARGE

DRILLING OPERATIONS

I. HYDROGEN SULFIDE PHYSICAL PROPERTIES AND TOXICITY - Hydrogen sulfide is extremely toxic. The acceptable concentration for eight-hour exposure is 20 ppm, which is .002% by volume. Hydrogen sulfide is heavier than air (specific gravity - 1.192) and is colorless. It forms an explosive mixture with air between 4.3 and 46.0 volume percent. Toxicity data for hydrogen sulfide and various gasses are compared in the table below.

Common Name	Chemical Formula	Sp. Gravity (Air =1)	Threshold Limit	Hazardous Limit	Lethal Conc.
Hydrogen Cyanide	HCN	0.94	10 ppm	150 ppm	300 ppm
Hydrogen Sulfide	H₂S	1.18	10 ppm * 20 ppm **	250 ppm/hr	600 ppm
Sulfur Dioxide	SO₂	2.21	5 ppm		1000 ppm
Chlorine	Cl ₂	2.45	1 ppm	4 ppm/hr	1000 ppm
Carbon Monoxide	СО	0.97	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	CO ₂	1.52	5000 ppm	5%	10%
Methane	CH ₄	. 0.55	9%	Combustabe above 5% in air	

*Threshold Limit - concentration at which it is believed that all workers may be repeatedly exposed day after day without adverse effects, 10 ppm = 1972 ACGIH concentration (American Conference of Governmental Industrial Hygienist).

**Threshold Limit = 20 ppm - 1966 ANSI acceptable ceiling concentration for eight-hour exposure (based on a 40-hour week) per OSHA Rules and Regulations (Federal Register, Vol. 37, #202, Part II, dated October 18, 1972.

-2-

II. PHYSICAL EFFECTS OF HYDROGEN SULFIDE - The physiological effects of hydrogen sulfide are summarized in the table below.

Percent Vol.	Concentration ppm	Physical Effects
0.001	10	obvious and unpleasant odor.
0.002	20	Safe for 8-hour exposure.
0.01	100	Kills smell in 3 to 15 minutes, may sting eyes and throat.
0.02	200	Kills smell shortly, stings eyes and throat.
0.05	500	Dizziness, breathing ceases in a few minutes, needs prompt artificial resuscitation.
0.07	700	Unconscious quickly, death will result if not rescued promptly.
0.10	1000	Unconscious at once, followed by death within minutes.

- III. ACCIDENTAL RELEASE OF HYDROGEN SULFIDE The possible release of hydrogen sulfide gas could result from leakage at either wellhead, flow lines, separators or drill string at this drilling location.
 - A. In the event of an accidental release, the tool pusher, supervisor or agent of the operator in the vicinity at the time of the discharge will be in charge of all activities on the ground and shall be responsible for the following.
 - 1. Notify all personnel, Company or outside, that are in the area to evacuate as soon as possible. This includes drilling rig crews, roustabout gangs, supervisory personnel, maintenance personnel, sales representatives, farm or ranch hands, visitors and all others that may be in the vicinity.
 - 2. Notify the County Sheriff's office, and the Department of Public Safety, and request their assistance to provide road blocks and direct traffic away from the drilling location. They should also be asked to assist in the evacuation of residents, if any, in affected area.
 - 3. Alert local Hospital and Fire Department in the event that medical services or ambulance assistance is needed.

- 4. Call the Operations Manager in the Midland Office and advise him of the nature and extent of the emergency situation.
- B. Operations Manager or his assistant will notify the appropriate state and federal agencies that the contingency plan has been activated and what level and type of reaction has already been initiated.
- C. Fasken's Senior Representative or employee on the scene will be in charge and shall initiate measures necessary to bring the gas flow under control securing whatever additional personnel and equipment are necessary to control the flow in the shortest time thereby reducing potential exposure of the general public to hydrogen sulfide
- IV. WEATHER CONDITIONS During adverse weather conditions such as drizzle, rain, fog, calm winds, and snow, hydrogen sulfide collects in low lying areas. These areas should be avoided, any personnel in such areas should be evacuated, and law enforcement personnel should be requested to keep people and traffic from entering. Should moderate, undirectional winds be blowing hydrogen sulfide from the source of the discharge toward a populated area, residents and other personnel should be evacuated by law enforcement personnel who should then maintain an exclusion perimeter to avoid people from reentering the area until the emergency is over.
- V. TERMINATION OF EMERGENCY AND FOLLOW-UP PROCEDURES Fasken's Senior Representative or employee on the scene, with the cooperation of the Senior Law Enforcement Officer in whose jurisdiction the emergency occurred, will declare the emergency terminated when there is no further danger to oilfield personnel or general public. This will occur only after a sufficient number of gas measurements in the vicinity have been made by a qualified technician showing that hydrogen sulfide concentration is below the 20 ppm threshold. In addition, the Operator's Senior Representative or employee will perform the following duties connected with the emergency:
 - A. Notify all cooperating law enforcement agencies and emergency medial services that the emergency has been terminated.
 - B. Notify all evacuees that they may return safely to their residences or job sites.
 - C. Make an estimate of damages and/or expenses incurred in the control of the emergency, the evacuation of any persons and the destruction of property, if any, including domestic animals and livestock. He is to make an itemized list of all such damages and/or expenses along with their addresses, and any other specific information pertinent to the situation. He is to deliver this list to the Operations Manager as soon as possible.
 - D. **UNDER NO CIRCUMSTANCE** are damage estimates, names of affected personnel, if any, or any other information pertaining to the emergency to be given to the press. Public information regarding the emergency will be issued by headquarters office in Midland, Texas.
- VI. Copies of the Contingency Plan are available in Fasken's office in Midland, Texas.
- VII. This plan is subject to approval of the state and federal agencies and shall be revised as required.

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Fasken Oil and Ranch, Ltd.

H2S Contingency Plan

Emergency Phone Numbers

Laguna 16 State No. 2H

Fasken Oil and Ranch, Ltd.

432 687-1777

Key Personnel

Tommy Taylor, Drilling Manager	432 556-2228
Cory Frederick, Drilling Engineer	432-288-0086
Deryl Briles, Drilling Foreman	432 556-4269
Jimmy Davis, Operations Manager	432 557-5668

Hobbs, Lea County, New Mexico

Ambulance	911
State Police	911 or 575 392-5580
Sheriff's Office	911 or 575 396-3611
Fire Department	911 or 575 397-9308
Local Emergency Planning Committee	575 393-2870
New Mexico Oil Conservation Division	575 393-6161
State Police Sheriff's Office Fire Department Local Emergency Planning Committee	911 or 575 392-558(911 or 575 396-361 911 or 575 397-9308 575 393-2870

Carlsbad, Eddy County, New Mexico

911
911 or 575 885-3138
911 or 575 887-7551
911 or 575 885-3125
575 887-7553
575 887-6544
575 748-1283

Statewide and National Emergency Numbers

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New Mexico Department of Homeland Security	
And Emergency Management	505 476-9600
New Mexico State Emergency Operations	
Center (24 Hour Number)	505 476-9635
National Emergency Response Center	800 424-8802

Other Numbers for Emergency Response

Boots & Coots IWC	800 256-9688 or 281 931-8884
Cudd Pressure Control	432 563-3356
MCH Care Star Flight Service (air ambulance)	432 640-4000
Aerocare (air ambulance)	806 725-1111

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Page 1 of 2



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Job Number: 12 Company: Fasken Oil and Ranch, Ltd. Lease/Well: Laguna "16" State No. 2H Location: Sec. 16, T20S, R30E Rig Name: Precision Rig No. 75 State/County: New Mexico/ Lea Country: USA API Number: Elevation (To MSL): 0.00 ft RKB: 0.00 ft Projection System: US State Plane 1927 (Exact solution) Projection Group: Texas Central 4203 Projection Datum: CLARKE 1866 Magnetic Declination: 3.19 Grid Convergence: 2.41208 E Date: Thursday, June 28, 2012

Calculated by HawkEye Software Minimum Curvature Method Vertical Section Plane 2.98° Northing (US ft): 810940.54 Easting (US ft): 3455231.48 Latitude: 31°48'43.5024" N Longitude: -95°38'50.7877" W Direction Reference: Grid North

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Interasureu ale		71/0	FIA	NIC .	Ve	Classing	Walk	Build	DIS	Commission
Depth IN (Ft) De	はない物理がないでいた。ここでもの	TVD (Ft)	EW (Ft)	NS (Ft)	VS (Ft)	(Ft)	Rate °/100Ft	Rate °/100Ft	DLS %100Ft	Comment
E.M. E. MEANTACKER (MR)	NATION ALLENDER			0.00	0.00	0.00	0.00	0.00	0.00	
	0.00 0.00	0.00 100.00	0.00 0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00 0.00		0.00	0.00	0.02	0.00	0.00	0.00	0.00	
	0.00 0.00		0.00	0.02	0.02	0.02	0.00	0.00	0.00	
4	.40 70.18	9119.99	0.39	0.16	0.18	0.42	350.91	12.00	12.00	
	.80 70.18	9139.95	1.58	0.58	0.66	1.68	0.00		12.00	
	7.20 70.18 1.60 70.18		3.54 6.29	1.29 2.28	1.47 2.61	3.77 6 69	0.00 0.00	12.00	12.00 12.00	
			9.82	3.55	4.06	10.44	0.00		12.00	
	.40 70.18	9218.74	14.11	5.10	5.83	15.01	0.00	12.00	12.00	
		02.011		••••						
	80 70.18	9238.00	19.17	6.92	7.91	20.38	0.00		12 00	
	20 70.18		24.99	9.02	10.30	26.56	0.00		12 00	
	60 70.18	9275.77	31.54	11.38	13.01	33.53	0.00		12.00	
	.00 70.18	9294.20	38 83	14.01	16.01	41.28	0.00		12 00	
9318.66 26	.24 70.18	9311.09	46.29	16.70	19.08	49.20	0.00	12 00	12.00	
9343.20 26	.24 70 18	9333.11	56.49	20.37	23.28	60.05	0.00	0.00	0.00	
9363.20 27	.08 65 17	9350.98	64.79	23.79	27.12	69.01	-25.04	4.22	12.00	
	.09 60.47	9368.71	73.02	28.02	31.77	78.21	-23.51	5 06	12.00	
	.26 56 09	9386.26	81.17	33.07	37.24	87.65	-21.90		12.00	
9423.20 30	.55 52.04	9403.60	89.24	38.92	43.50	97.35	-20.29	6.47	12.00	
9443.20 31	.96 48.29	9420.70	97.19	45.57	50.55	107.35	-18.73	7.05	12.00	
	.47 44.84	9437.53	105.04	53.00	58.38	117.65	-17 26		12.00	
9483.20 35	.07 41.66	9454 06	112.74	61 21	66.98	128.29	-15 90	8.00	12.00	
9503 20 36	.74 38.73	9470 26	120.31	70.17	76.32	139.27	-14.65		12.00	
9523.20 38	49 36.02	9486 10	127.71	79.87	86 39	150.63	-13 53	8.71	12 00	
9543.20 40	.29 33.52	9501.56	134.94	90.30	97.18	162.37	-12.52	9.00	12.00	
9563.20 42	.13 31.20	9516.60	141.99	101.43	108.66	174.49	-11 61	9 25	12.00	
9583 20 44	.03 29.04	9531.21	148.84	113.24	120.82	187.02	-10.80	9 47	12.00	•
9603.20 45	.96 27.02	9545.36	155.48	125.73	133.63	199.95	-10.08	· 9.66		
9623.20 47	.92 25 13	9559.01	161.90	138.85	147.07	213.29	-9.44	9 82	12 00	
9643.20 49	.92 23.36	9572.15	168.09	152.60	161.12	227.02	-8.87	9.97	12.00	
	.94 21.69	9584 76	174.03	166.94	175.75	241 15	-8.36		12.00	
	98 20.11	9596.81	179.72	181.85	190.94	255.67	-7.91	10 21		
9703.20 56	.04 18.61	9608.28	185.15	197.31	206.65	270.58	-7.51	10.31	12.00	
9723.20 58	12 17 18	9619.15	190.30	213.28	222.88	285.84	-7 15	10.39	12.00	
9743.20 60	.21 15.81	9629.40	195.18	229.75	239 57	301.46	-6.83	10 47	12 00	
9763.20 62			199.76	246.68	256.71	317.42	-6.55	10.54		
9783.20 64		9647.98	204.04	264.03	274.27	333.69	-6.30	10.64		
	.57 12.02	9656 27	208 02	281.79	292.21	350.25	-6.08	10 65		,
9823.20 68		9663 88	211.68	299.92	310.50	367.10	-5 89	10.69		
9843.20 70	05 0.70	0670 70	21E 02	210 20	220 42	204.00	E 70	10 72	12.00	
9843.20 70 9863.20 73		9670.79 9676.99	215.03 218.05	318 38 337.15	329.12 348.02	384.20 401.52	-5.72 -5.57	10.73 10 77		
	.00 8.59		218.05	356.20	346.02	401.52	-5.57 -5.45	10.77		
		0002.70			ath: Propos		0.40	10.00	12.00	· · · · · · · · · · · · · · · · · · ·

Page # 1 < Wellpath: Proposal Curve>

Measured Depth	INC	AZM	TVD	EW	NS	VS	Closure	Walk Rate	Build Rate	DLS	Comment
- (Ft)	Deg	Deg	(Ft)	(Ft)	(Et)	(Ft)	(Et)	°/100Ft	°/100Ft	1100-0	
9903.20	77.33	6.43	9687.23	223.09	375.48	386.55	436.76	-5.34	10.82	12.00	
9923.20	79.50	5.38	9691.25	225.11	394.97	406.12	454.61	-5.25	10.84	12.00	
9943.20	81.67	4.34	9694.52	226.78	414.62	425.84	472.59	-5.18	10.86	12.00	
9963.20	83.84	3.32	9697.04	228.10	434.42	445.67	490.66	-5.12	10.87	12.00	
9983.20	86.02	2.31	9698.81	229.08	454.32	465.59	508.80	-5.08	10.88	12.00	
10003.20	88.20	1.30	9699.82	229.71	474.28	485.56	526.98	-5.05	10.89	12.00	
10023.20	90.38	0.29	9700.07	229.99	494.27	505.55	545.16	-5.04	10.89	12.00	
10028.92	91.00	360.00	9700.00	230.00	500.00	511.26	550.36	-5.04	10.89	12.00	
10029.71	91.09	0.00	9699.99	230.00	500.78	512.05	551.07	0.02	12.06	12.06	Landing Point,
13954.64	91.09	0.00	9625.00	230.00	4424.99	4430.97	4430.97	0.00	0.00	0.00	End of Lateral

