

Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☐ DRILL ☐ REENTER 1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other 1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone		5. Lease Serial No. 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No. 9. API Well No. 30-015-56435
2. Name of Operator 3a. Address 3b. Phone No. (include area code)		10. Field and Pool, or Exploratory 11. Sec., T. R. M. or Blk. and Survey or Area 12. County or Parish 13. State
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		14. Distance in miles and direction from nearest town or post office* 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 16. No of acres in lease 17. Spacing Unit dedicated to this well 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 19. Proposed Depth 20. BLM/BIA Bond No. in file 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration
24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the BLM.		
25. Signature Title		Name (Printed/Typed) Date
Approved by (Signature) Title		Name (Printed/Typed) Office

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature Title	Name (Printed/Typed) Office	Date
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Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
 Conditions of approval, if any, are attached.

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.

(Continued on page 2)

*(Instructions on page 2)



C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION		Revised July 9, 2024	
			Submittal Type:	☒ Initial Submittal
				☐ Amended Report
		☐ As Drilled		

WELL LOCATION INFORMATION

API Number 30-015- 56435	Pool Code 96718	Pool Name LOCO HILLS; GLORIETA-YESO
Property Code 337178	Property Name TESORO 20 FEDERAL COM	Well Number 90H
OGRID No. 328947	Operator Name SPUR ENERGY PARTNERS LLC.	Ground Level Elevation 3638'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal		Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL D	Section 20	Township 17S	Range 30E	Lot	Ft. from N/S 710 FNL	Ft. from E/W 65 FWL	Latitude 32.8253393°N	Longitude 104.0025358°W	County EDDY
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Bottom Hole Location

UL A	Section 20	Township 17S	Range 30E	Lot	Ft. from N/S 1235 FNL	Ft. from E/W 50 FEL	Latitude 32.8238947°N	Longitude 103.9857219°W	County EDDY
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Dedicated Acres 320	Infill or Defining Well DEFINING	Defining Well API	Overlapping Spacing Unit (Y/N) N	Consolidation Code
Order Numbers.			Well setbacks are under Common Ownership: ☒ Yes ☐ No	

Kick Off Point (KOP)

UL A	Section 19	Township 17S	Range 30E	Lot	Ft. from N/S 1138 FNL	Ft. from E/W 818 FEL	Latitude 32.8241608°N	Longitude 104.0054099°W	County EDDY
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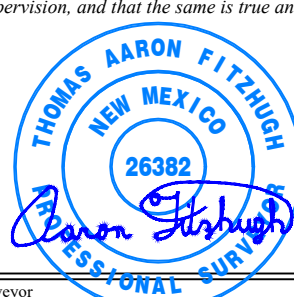
First Take Point (FTP)

UL D	Section 20	Township 17S	Range 30E	Lot	Ft. from N/S 1235 FNL	Ft. from E/W 100 FWL	Latitude 32.8238968°N	Longitude 104.0024210°W	County EDDY
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Last Take Point (LTP)

UL A	Section 20	Township 17S	Range 30E	Lot	Ft. from N/S 1235 FNL	Ft. from E/W 100 FEL	Latitude 32.8238947°N	Longitude 103.9858846°W	County EDDY
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Unitized Area or Area of Uniform Interest Y	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation: 3638'
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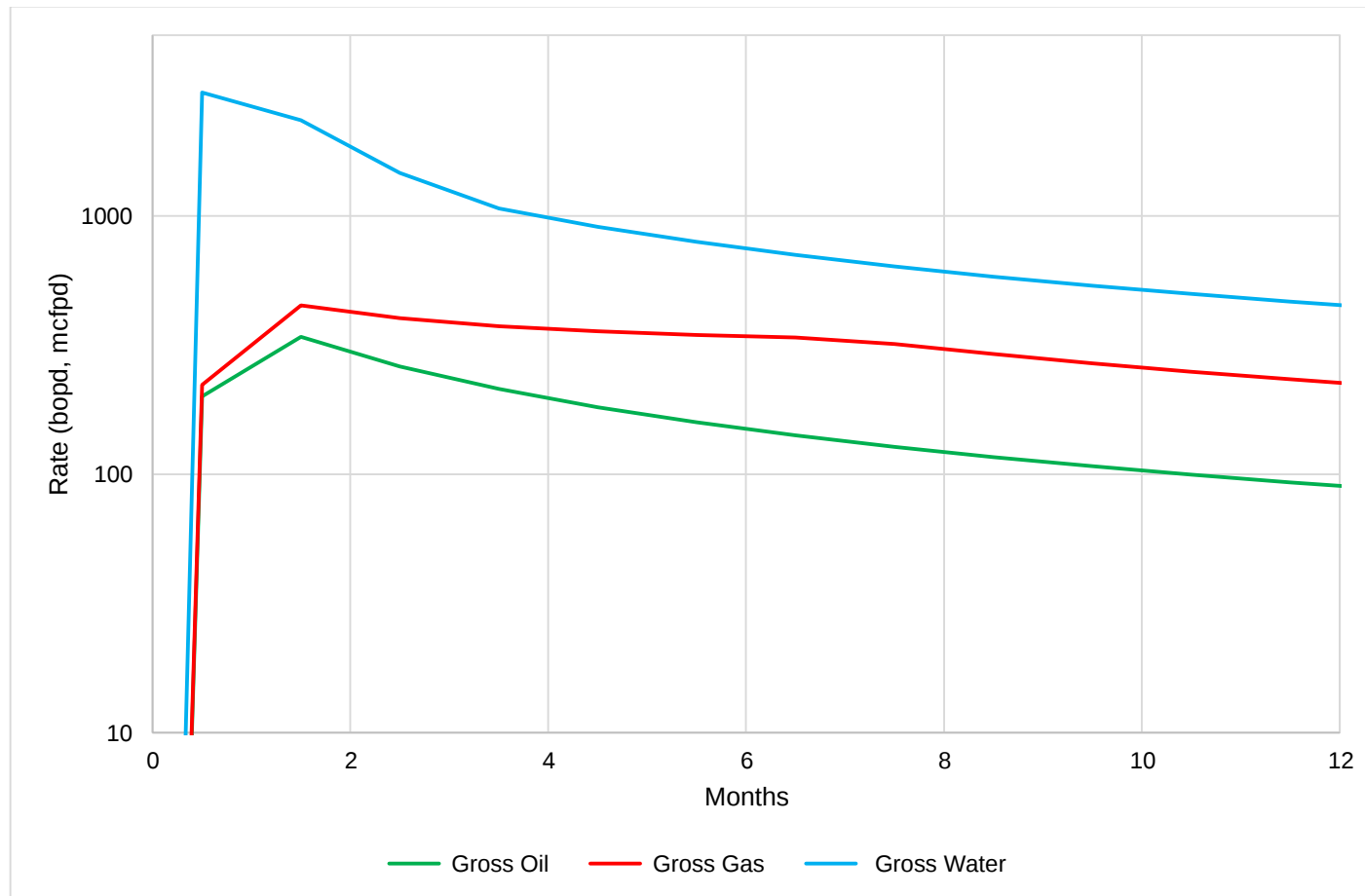
OPERATOR CERTIFICATIONS <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> <i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i> Sarah Chapman 08/29/2024		SURVEYOR CERTIFICATIONS <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me under my supervision, and that the same is true and correct to the best of my belief.</i> 	
Signature SARAH CHAPMAN		Signature and Seal of Professional Surveyor	
Printed Name SCHAPMAN@SPURENERGY.COM		Certificate Number 26382	Date of Survey 05/28/2024
Email Address			

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

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is a directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

P: FOUND ALUM CAP "1985"
N: 662228.3 - E: 645533.7

Maljamar Blinebry Type Curve



State of New Mexico
Energy, Minerals and Natural Resources DepartmentSubmit Electronically
Via E-permittingOil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505**NATURAL GAS MANAGEMENT PLAN**

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description
Effective May 25, 2021**I. Operator:** SPUR ENERGY PARTNERS LLC **OGRID:** 328947 **Date:** 08 / 26 / 2024**II. Type:** ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
TESORO 20 FEDERAL COM 70H	30-015-	D-20-17S-30E	690' FNL 65' FWL	335 BBL/D	365 MCF/D	1006 BBL/D
TESORO 20 FEDERAL COM 71H	30-015-	D-20-17S-30E	730' FNL 65' FWL	335 BBL/D	365 MCF/D	1006 BBL/D
TESORO 20 FEDERAL COM 90H	30-015-	D-20-17S-30E	710' FNL 65' FWL	304 BBL/D	331 MCF/D	1522 BBL/D

IV. Central Delivery Point Name: OCHO TESORO 20 FEDERAL COM TANK BATTERY [See 19.15.27.9(D)(1) NMAC]**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
TESORO 20 FEDERAL COM 70H	30-015-	09/28/2025	10/07/2025	11/03/2025	11/17/2025	11/29/2025
TESORO 20 FEDERAL COM 71H	30-015-	10/07/2025	10/16/2025	11/03/2025	11/17/2025	11/29/2025
TESORO 20 FEDERAL COM 90H	30-015-	10/16/2025	10/25/2025	11/03/2025	11/17/2025	11/29/2025

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.**VII. Operational Practices:** ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.**VIII. Best Management Practices:** ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:	<i>Sarah Chapman</i>
Printed Name:	SARAH CHAPMAN
Title:	REGULATORY DIRECTOR
E-mail Address:	SCHAPMAN@SPUREENERGY.COM
Date:	08/26/2024
Phone:	832-930-8613
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	



Natural Gas Management Plan – Attachment

VI. Separation equipment will be sized by construction engineering staff based on anticipated daily production to ensure adequate capacity.

VII. Spur Energy Partners LLC ("Spur") will take the following actions to comply with the regulations listed in 19.15.27.8:

- A. Spur will maximize the recovery of natural gas by minimizing waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. Spur will ensure that our wells will be connected to a natural gas gathering system with sufficient capacity to transport natural gas.
- B. All drilling operations will be equipped with a rig flare at least 100 feet from the nearest surface hole location. Rig flare will be utilized to combust any natural gas that is brought to surface during normal operations. In the case of emergency, flaring volumes will be reported appropriately.
- C. During completion operations any natural gas brought to surface will be flared. Immediately following completion operations, wells will flow to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. If natural gas does not meet gathering pipeline specifications, Spur will flare for 60 days or until natural gas meets the pipeline specifications. Spur will ensure flare is properly sized and is equipped with an automatic igniter or continuous pilot. Gas samples will be taken twice per week and natural gas will be routed into a gathering system as soon as the pipeline specifications are met.
- D. Natural gas will not be flared with the exception of 19.15.27.8(D)(1-4). If there is no adequate takeaway for the separator gas, wells will be shut-in until that natural gas gathering system is available with exception of emergency or malfunction situations. Volumes will be reported appropriately.
- E. Spur will comply with performance standards pursuant to 19.15.27.8(E)(1-8). All equipment will be designed and sized to handle maximum pressures to minimize waste. Storage tanks constructed after May 25, 2021 will be equipped with an automatic gauging system that reduces venting of natural gas. Flare stacks installed or replaced after May 25, 2021 will be equipped with an automatic igniter or continuous pilot. Spur will conduct AVO inspections as described in 19.15.27.8(E)(5)(a) with frequencies specified in 19.15.27.8(E)(5)(b) and (c). All emergencies or malfunctions will be resolved as quickly and safely as possible to minimize waste.
- F. The volume of natural gas that is vented or flared as the result of an emergency or malfunction during drilling and/or completion operations will be estimated and reported accordingly. The volume of natural gas that is vented, flared or beneficially used during production operations, will be measured and reported accordingly. Spur will install equipment to measure the volume of natural gas flared from existing piping or a flowline piped from equipment such as high-pressure separators, heater treaters, or VRUs associated with a well or facility associated with a well authorized by an APD after May 25, 2021 that has an average daily production of less than 60,000 cubic feet of natural gas. If metering is not practicable due to circumstances such as low flow rate or low pressure venting or flaring, Spur will estimate the volume of flared or vented natural gas. Measuring equipment will conform to industry standards and will not be equipped with a manifold



that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing equipment.

VIII. For maintenance activities involving production equipment and compression, venting be limited to the depressurization of the subject equipment to ensure safe working conditions. For maintenance of production equipment, the associated producing wells will be shut-in to eliminate venting. For maintenance of VRUs, all natural gas normally routed to the VRU will be routed to flare.

Spur Energy Partners LLC – Tesoro 20 Federal Com #90H

1. Geologic Formations

TVD of Target	5,675'
MD at TD	11,431'

Formation	Depth	Lithology	Expected Fluids
Quaternary	0'	Dolomite, other: Caliche	Useable Water
Rustler	295'	Dolomite, Shale, Anhydrite	Other: Brackish Water
Top Salt	435'	Anhydrite	Other: Salt
Tansill	1005'	Sandstone, Dolomite	None
Yates	1115'	Dolomite, Limestone, Shale, Siltstone	None
Seven Rivers	1405'	Dolomite, Limestone	Natural Gas, Oil
Queen	2025'	Anhydrite, Dolomite, Sandstone	Natural Gas, Oil
Grayburg	2405'	Anhydrite	Natural Gas, Oil
San Andres	2760'	Dolomite	Natural Gas, Oil
Glorieta	4160'	Dolomite, Siltstone	Natural Gas, Oil
Paddock	4285'	Dolomite, Limestone	Natural Gas, Oil
Blinberry	4765'	Dolomite, Limestone	Natural Gas, Oil
Abo	6550'	Dolomite, Limestone	Will Not Penetrate

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

2. Casing Program

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

Casing Formation Set Interval	Hole Size (in)	Casing Interval		Csg. Size (in)	Weight (lbs)	Grade	Conn.	SF	SF Burst	Body SF	Joint SF
		From (ft)	To (ft)					Collapse		Tension	Tension
Rustler	17.5	0	345	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
Seven Rivers	12.25	0	1500	9.625	36	J-55	BTC	1.125	1.2	1.4	1.4
N/A	8.75	0	6050	7	32	L-80	BK-HT	1.125	1.2	1.4	1.4
Yeso	8.75	6050	11431	5.5	20	L-80	BK-HT	1.125	1.2	1.4	1.4
SF Values will meet or Exceed											

Spur Energy Partners LLC – Tesoro 20 Federal Com #90H

	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.	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 intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 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?	

3. Cementing Program

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface Tail	0	345	165%
Intermediate (Lead)	0	345	100%
Intermediate (Tail)	345	1500	100%
Production (Lead)	0	5050	100%
Production (Tail)	5050	11431	25%

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H2O (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface Tail	326	13.2	1.87	9.92	6:59	Clas C Premium Plus Cement
Intermediate (Lead)	53	12	2.4	13.48	8:12	Clas C Premium Plus Cement
Intermediate (Tail)	397	13.2	1.87	9.92	6:59	Clas C Premium Plus Cement
Production (Lead)	814	11.4	2.42	15.29	N/A	Clas C Premium Plus Cement
Production (Tail)	1216	13.2	1.56	9.81	N/A	Clas C Premium Plus Cement

Spur Energy Partners LLC – Tesoro 20 Federal Com #90H**4. Pressure Control Equipment**

Spur requests a variance to use a flex line from the BOP to the choke manifold. Documentation will be attached in the APD and be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no bends).

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
12.25" Hole	13-5/8"	5M	Annular	✓	70% of working pressure
		5M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram	✓	
			Double Ram		
			Other*		
8.75" Hole	13-5/8"	5M	Annular	✓	70% of working pressure
		5M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram	✓	
			Double Ram		
			Other*		

Spur Energy Partners LLC will be utilizing a 5M BOP

Condition	Specify what type and where?
BH Pressure at deepest TVD	2627 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	126°F

*Specify if additional ram is utilized.

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

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

Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
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Spur Energy Partners LLC – Tesoro 20 Federal Com #90H

Y	Are anchors required by manufacturer?
	A conventional 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. See attached schematics.

5. BOP Break Testing Request

Spur Energy Partners LLC requests permission to adjust the BOP break testing requirements as per the verbal agreement reached over the phone between SPUR/BLM on September 7, 2020. A separate sundry will be sent prior to spud that reflects the pad-based break testing plan.

BOP break test under the following conditions:

- After a full BOP test is conducted
- When skidding to drill the production section, where the surface casing point is shallower than the 3 Bone Spring or 10,000 TVD.
- When skidding to drill a production section that does not penetrate the 3rd Bone Spring or deeper.

If the kill line is broken prior to skid, four tests will be performed.

- 1) The void between the wellhead and the spool (this consists of two tests)
- 2) The spool between the kill lines and the choke manifold (this consists of two tests)

If the kill line is not broken prior to skid, two tests will be performed.

- 1) The void between the wellhead and the pipe rams

6. Mud Program

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.

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From (ft)	To (ft)				
0	345	Water-Based Mud	8.6-8.9	32-36	N/C
345	1500	Brine	10.0-10.5	32-36	N/C
1500	11431	Brine	10.0-10.5	32-36	N/C

What will be used to monitor the loss or gain of fluid?	PVT/PASON/Visual Monitoring
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Spur Energy Partners LLC – Tesoro 20 Federal Com #90H**7. Logging and Testing Procedures**

Logging, Coring and Testing.		
Yes	Will run GR from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.	
No	Logs are planned based on well control or offset log information.	
No	Drill stem test? If yes, explain	
No	Coring? If yes, explain	
Additional logs planned	Interval	
No	Resistivity	
No	Density	
No	CBL	
Yes	Mud log	ICP - TD
No	PEX	

8. Drilling Conditions

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.

Hydrogen Sulfide (H ₂ S) monitors will be installed prior to drilling out the surface shoe. If H ₂ S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
N	H ₂ S is present
Y	H ₂ S Plan attached

Total estimated cuttings volume: 1112.6 bbls.

Spur Energy Partners LLC – Tesoro 20 Federal Com #90H**9. Other facets of operation**

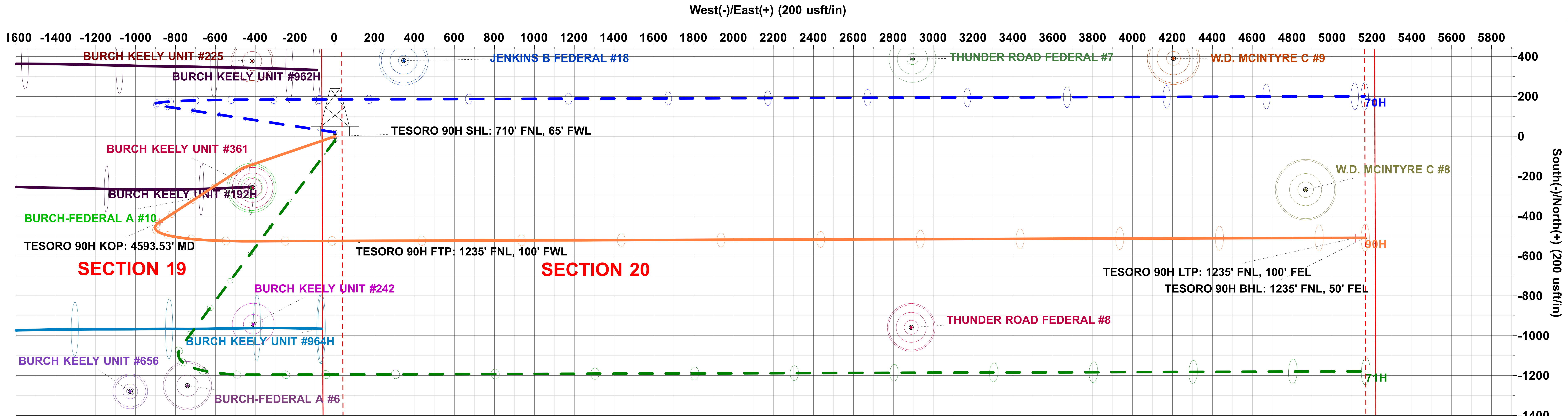
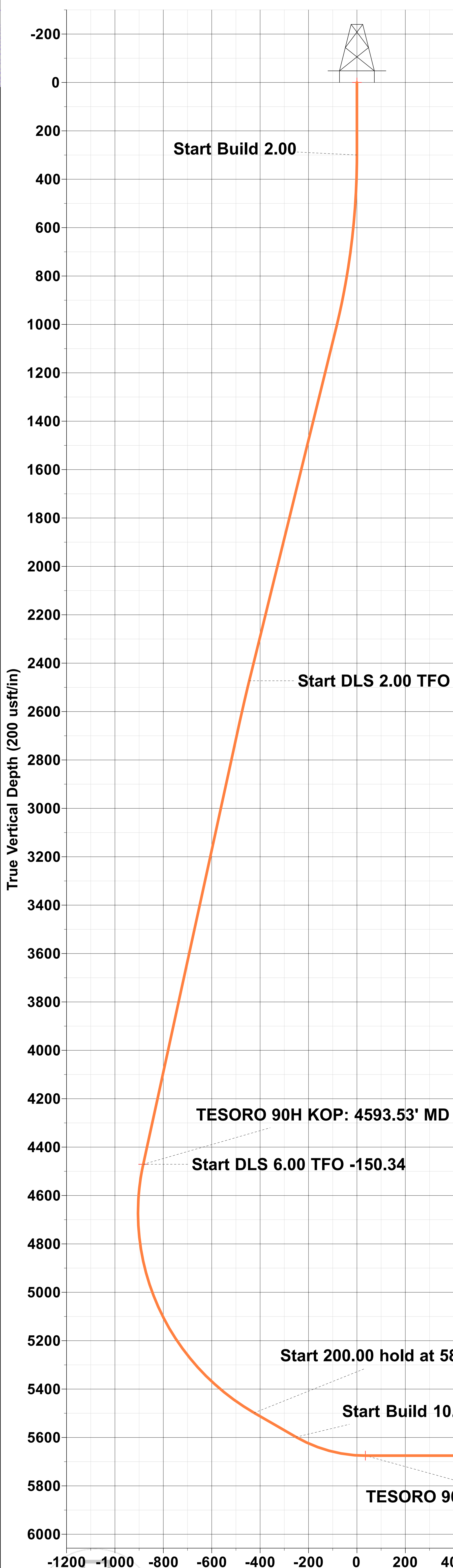
	Yes/No
Will more than one drilling rig be used for drilling operations? If yes, describe. Spur Energy Partners LLC. requests the option to contract a Surface Rig to drill, set surface/intermediate casing and cement for this well. If the timing between rigs is such that Spur Energy Partners LLC. would not be able to preset surface/intermediate the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig.	Yes

Attachments

- ☒ Directional Plan
☒ H2S Contingency Plan
☒ Akita 57 Attachments
☒ BOP Schematics
☒ Transcend Spudder Rig Attachments

10. Company Personnel

Name	Title	Office Phone	Mobile Phone
Christopher Hollis	Drilling Manager	832-930-8629	713-380-7754
Johnny Nabors	Senior Vice President Operations	832-930-8502	281-904-8811

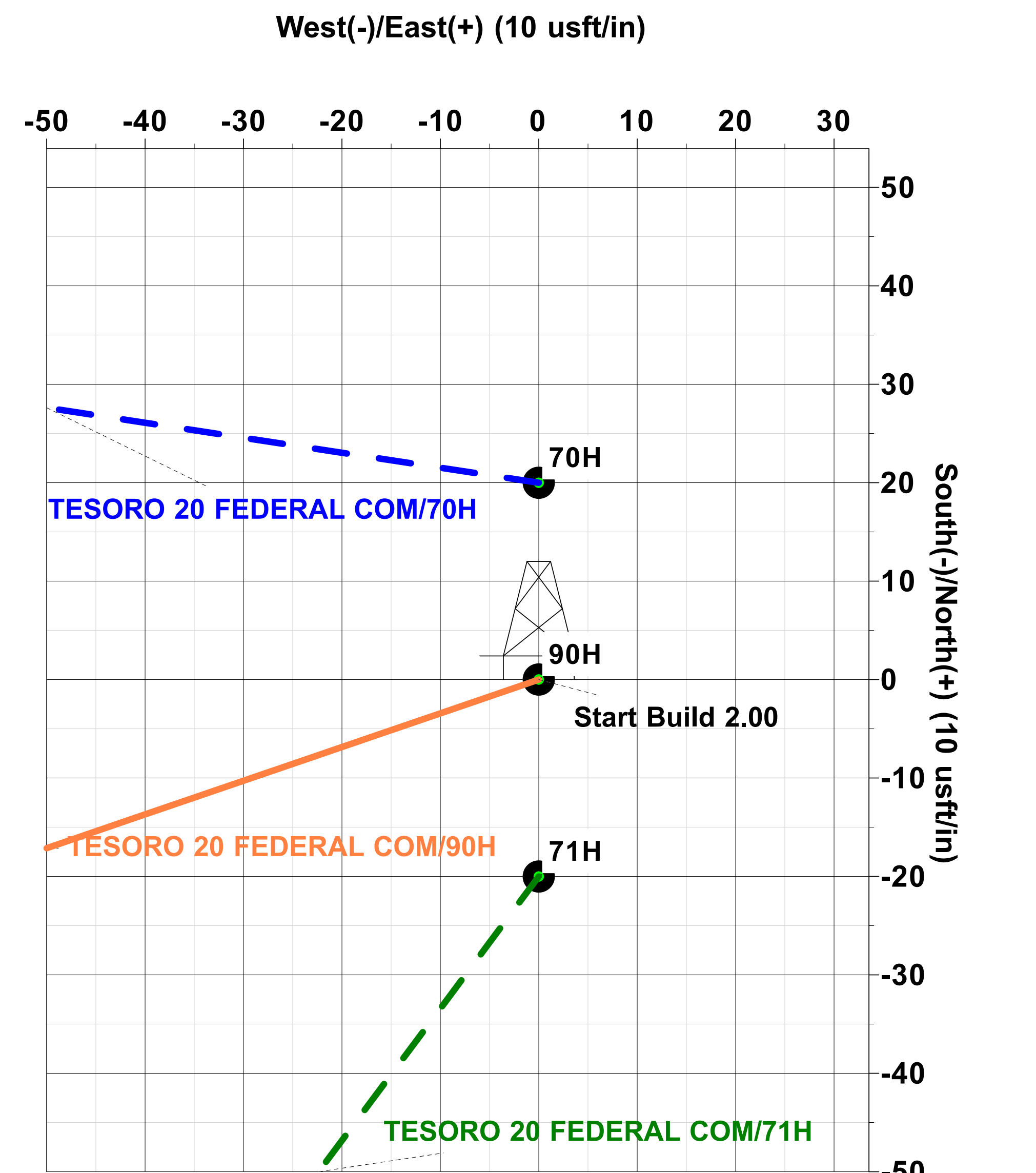
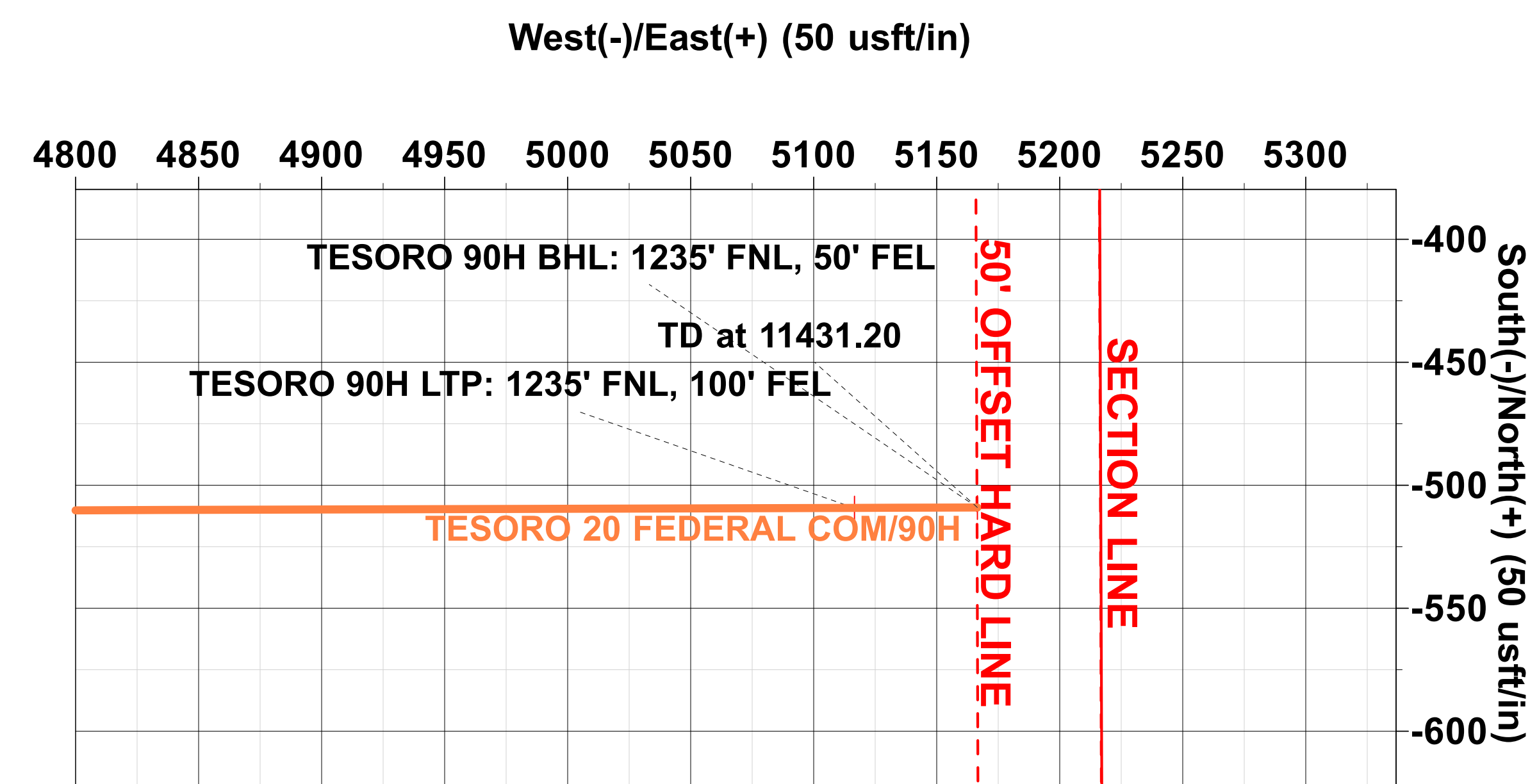
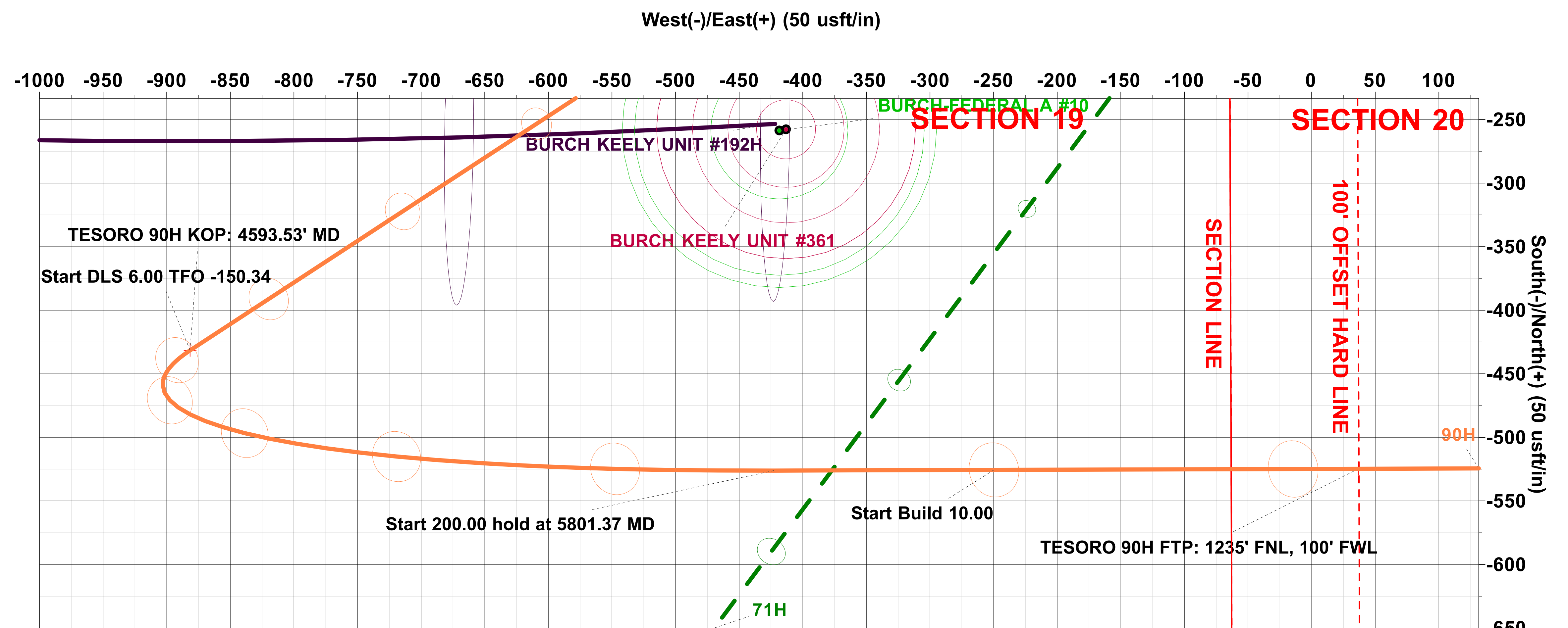


WELL DETAILS: 90H								
Rig Name: AKITA 57 RKB = 20' @ 3658.00usft (AKITA 57)								
Ground Level: 3638.00								
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude			
0.00	0.00	664150.30	642951.90	32.82534	-104.00254			
SECTION DETAILS								
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00
3	1028.75	14.57	251.10	1020.92	-29.86	-87.22	2.00	-87.31
4	2528.75	14.57	251.10	2472.64	-152.13	-444.34	0.00	-444.82
5	2708.19	14.57	236.80	2646.37	-171.81	-484.61	2.00	-485.14
6	4593.53	14.57	236.80	4471.05	-431.55	-881.58	0.00	-882.93
7	5801.37	60.00	89.82	5498.24	-526.11	-422.88	6.00	-424.53
8	6001.37	60.00	89.82	5598.24	-525.58	-249.68	0.00	-251.33
9	6301.37	90.00	89.82	5675.00	-524.70	36.80	10.00	35.15
10	11381.19	90.00	89.82	5675.00	-509.15	5116.60	0.00	5114.98
11	11431.20	90.00	89.82	5675.00	-509.00	5166.60	0.00	5164.98
DESIGN TARGET DETAILS								

DESIGN TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	
TESORO 90H BHL: 1235' FNL, 50' FEL	5675.00	-509.00	5166.60	663641.30	648118.50	
TESORO 90H FTP: 1235' FNL, 100' FWL	5675.00	-524.70	36.80	663625.60	642988.70	
TESORO 90H KOP: 4593.53' MD	4471.05	-431.55	-881.58	663718.75	642070.32	
TESORO 90H LTP: 1235' FNL, 100' FEL	5675.00	-509.20	5116.60	663641.10	648068.50	
TESORO 90H SHL: 710' FNL, 65' FWL	0.00	0.00	0.00	664150.30	642951.90	

PROJECT DETAILS: EDDY COUNTY, NM (NAD 83 - NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level



TESORO 90H BHL: 1235' FNL, 50' FEL
TD at 11431.20
TESORO 90H LTP: 1235' FNL, 100' FEL

Project: EDDY COUNTY, NM (NAD 83 - NME)
Site: TESORO 20 FEDERAL COM
Well: 90H
Wellbore: Wellbore #1
Design: PERMIT

Vertical Section at 89.82° (200 usft/in)

Plan: PERMIT (90H/Wellbore #1)

Created By: PROTOTYPE WELL PLANNING / Date: 15:24, August 05 2024

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SPUR ENERGY PARTNERS, LLC

EDDY COUNTY, NM (NAD 83 - NME)

TESORO 20 FEDERAL COM

90H

Wellbore #1

Plan: PERMIT

Standard Planning Report

05 August, 2024

Planning Report

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well 90H
Company:	SPUR ENERGY PARTNERS, LLC	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Project:	EDDY COUNTY, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site:	TESORO 20 FEDERAL COM	North Reference:	Grid
Well:	90H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Project	EDDY COUNTY, NM (NAD 83 - NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		TESORO 20 FEDERAL COM			
Site Position:		Northing:	664,170.30 usft	Latitude:	32.82540
From:	Map	Easting:	642,951.90 usft	Longitude:	-104.00254
Position Uncertainty:		0.00 usft	Slot Radius:	13-3/16 "	

Well	90H					
Well Position	+N/-S	0.00 usft	Northing:	664,150.30 usfi	Latitude:	32.82534
	+E/-W	0.00 usft	Easting:	642,951.90 usfi	Longitude:	-104.00254
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usfi	Ground Level:	3,638.00 usfi
Grid Convergence:		0.18 °				

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/24/2024	6.43	60.28	47,478.97182932

Design	PERMIT				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	89.82	

Plan Survey Tool Program	Date	8/5/2024			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	11,431.20 PERMIT (Wellbore #1)	MWD+IFR1+SAG+FDIR		
			OWSG MWD + IFR1 + Sag		

Planning Report

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well 90H
Company:	SPUR ENERGY PARTNERS, LLC	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Project:	EDDY COUNTY, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site:	TESORO 20 FEDERAL COM	North Reference:	Grid
Well:	90H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,028.75	14.58	251.10	1,020.92	-29.86	-87.22	2.00	2.00	0.00	251.10	
2,528.75	14.58	251.10	2,472.64	-152.13	-444.34	0.00	0.00	0.00	0.00	
2,708.19	14.57	236.80	2,646.37	-171.81	-484.61	2.00	0.00	-7.97	-96.94	
4,593.53	14.57	236.80	4,471.05	-431.55	-881.58	0.00	0.00	0.00	0.00	
5,801.37	60.00	89.82	5,498.24	-526.11	-422.88	6.00	3.76	-12.17	-150.34	
6,001.37	60.00	89.82	5,598.24	-525.58	-249.68	0.00	0.00	0.00	0.00	
6,301.37	90.00	89.82	5,675.00	-524.70	36.80	10.00	10.00	0.00	0.00	TESORO 90H FTP
11,381.20	90.00	89.82	5,675.00	-509.15	5,116.60	0.00	0.00	0.00	0.00	TESORO 90H LTP:
11,431.20	90.00	89.82	5,675.00	-509.00	5,166.60	0.00	0.00	0.00	0.00	TESORO 90H BHL

Planning Report

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well 90H
Company:	SPUR ENERGY PARTNERS, LLC	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Project:	EDDY COUNTY, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site:	TESORO 20 FEDERAL COM	North Reference:	Grid
Well:	90H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Planned 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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TESORO 90H SHL: 710' FNL, 65' FWL									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	2.00	251.10	399.98	-0.57	-1.65	-1.65	2.00	2.00	0.00
500.00	4.00	251.10	499.84	-2.26	-6.60	-6.61	2.00	2.00	0.00
600.00	6.00	251.10	599.45	-5.08	-14.85	-14.86	2.00	2.00	0.00
700.00	8.00	251.10	698.70	-9.03	-26.38	-26.41	2.00	2.00	0.00
800.00	10.00	251.10	797.47	-14.10	-41.18	-41.22	2.00	2.00	0.00
900.00	12.00	251.10	895.62	-20.28	-59.23	-59.29	2.00	2.00	0.00
1,000.00	14.00	251.10	993.06	-27.56	-80.51	-80.59	2.00	2.00	0.00
1,028.75	14.58	251.10	1,020.92	-29.86	-87.22	-87.31	2.00	2.00	0.00
1,100.00	14.58	251.10	1,089.87	-35.67	-104.18	-104.30	0.00	0.00	0.00
1,200.00	14.58	251.10	1,186.65	-43.82	-127.99	-128.13	0.00	0.00	0.00
1,300.00	14.58	251.10	1,283.44	-51.97	-151.80	-151.96	0.00	0.00	0.00
1,400.00	14.58	251.10	1,380.22	-60.12	-175.61	-175.80	0.00	0.00	0.00
1,500.00	14.58	251.10	1,477.00	-68.28	-199.42	-199.63	0.00	0.00	0.00
1,600.00	14.58	251.10	1,573.78	-76.43	-223.22	-223.46	0.00	0.00	0.00
1,700.00	14.58	251.10	1,670.56	-84.58	-247.03	-247.30	0.00	0.00	0.00
1,800.00	14.58	251.10	1,767.35	-92.73	-270.84	-271.13	0.00	0.00	0.00
1,900.00	14.58	251.10	1,864.13	-100.88	-294.65	-294.96	0.00	0.00	0.00
2,000.00	14.58	251.10	1,960.91	-109.03	-318.46	-318.80	0.00	0.00	0.00
2,100.00	14.58	251.10	2,057.69	-117.18	-342.26	-342.63	0.00	0.00	0.00
2,200.00	14.58	251.10	2,154.47	-125.33	-366.07	-366.46	0.00	0.00	0.00
2,300.00	14.58	251.10	2,251.26	-133.49	-389.88	-390.30	0.00	0.00	0.00
2,400.00	14.58	251.10	2,348.04	-141.64	-413.69	-414.13	0.00	0.00	0.00
2,500.00	14.58	251.10	2,444.82	-149.79	-437.50	-437.96	0.00	0.00	0.00
2,528.75	14.58	251.10	2,472.64	-152.13	-444.34	-444.82	0.00	0.00	0.00
2,600.00	14.47	245.43	2,541.62	-158.74	-460.92	-461.42	2.00	-0.15	-7.96
2,708.19	14.57	236.80	2,646.37	-171.81	-484.61	-485.14	2.00	0.10	-7.97
2,800.00	14.57	236.80	2,735.22	-184.46	-503.94	-504.51	0.00	0.00	0.00
2,900.00	14.57	236.80	2,832.01	-198.24	-524.99	-525.61	0.00	0.00	0.00
3,000.00	14.57	236.80	2,928.79	-212.01	-546.05	-546.71	0.00	0.00	0.00
3,100.00	14.57	236.80	3,025.57	-225.79	-567.10	-567.81	0.00	0.00	0.00
3,200.00	14.57	236.80	3,122.35	-239.57	-588.16	-588.91	0.00	0.00	0.00
3,300.00	14.57	236.80	3,219.14	-253.34	-609.22	-610.01	0.00	0.00	0.00
3,400.00	14.57	236.80	3,315.92	-267.12	-630.27	-631.11	0.00	0.00	0.00
3,500.00	14.57	236.80	3,412.70	-280.90	-651.33	-652.21	0.00	0.00	0.00
3,600.00	14.57	236.80	3,509.48	-294.67	-672.38	-673.30	0.00	0.00	0.00
3,700.00	14.57	236.80	3,606.27	-308.45	-693.44	-694.40	0.00	0.00	0.00
3,800.00	14.57	236.80	3,703.05	-322.23	-714.49	-715.50	0.00	0.00	0.00
3,900.00	14.57	236.80	3,799.83	-336.00	-735.55	-736.60	0.00	0.00	0.00
4,000.00	14.57	236.80	3,896.61	-349.78	-756.60	-757.70	0.00	0.00	0.00
4,100.00	14.57	236.80	3,993.40	-363.56	-777.66	-778.80	0.00	0.00	0.00
4,200.00	14.57	236.80	4,090.18	-377.34	-798.72	-799.90	0.00	0.00	0.00
4,300.00	14.57	236.80	4,186.96	-391.11	-819.77	-821.00	0.00	0.00	0.00
4,400.00	14.57	236.80	4,283.74	-404.89	-840.83	-842.10	0.00	0.00	0.00
4,500.00	14.57	236.80	4,380.53	-418.67	-861.88	-863.19	0.00	0.00	0.00
4,593.53	14.57	236.80	4,471.05	-431.55	-881.58	-882.93	0.00	0.00	0.00
TESORO 90H KOP: 4593.53' MD									
4,600.00	14.24	236.02	4,477.31	-432.44	-882.92	-884.27	6.00	-5.19	-12.07
4,650.00	11.75	228.54	4,526.03	-439.25	-891.83	-893.21	6.00	-4.98	-14.96
4,700.00	9.55	217.42	4,575.17	-445.91	-898.17	-899.57	6.00	-4.40	-22.25

Planning Report

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well 90H
Company:	SPUR ENERGY PARTNERS, LLC	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Project:	EDDY COUNTY, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site:	TESORO 20 FEDERAL COM	North Reference:	Grid
Well:	90H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Planned 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)
4,750.00	7.89	200.79	4,624.60	-452.42	-901.91	-903.33	6.00	-3.31	-33.25
4,800.00	7.16	178.41	4,674.18	-458.75	-903.04	-904.48	6.00	-1.46	-44.76
4,850.00	7.63	155.23	4,723.78	-464.88	-901.56	-903.02	6.00	0.93	-46.38
4,900.00	9.11	137.17	4,773.25	-470.79	-897.48	-898.96	6.00	2.96	-36.12
4,950.00	11.21	124.95	4,822.47	-476.48	-890.80	-892.30	6.00	4.20	-24.44
5,000.00	13.65	116.78	4,871.30	-481.93	-881.55	-883.06	6.00	4.88	-16.33
5,050.00	16.28	111.13	4,919.60	-487.11	-869.74	-871.27	6.00	5.25	-11.31
5,100.00	19.01	107.04	4,967.25	-492.03	-855.42	-856.96	6.00	5.47	-8.19
5,150.00	21.81	103.95	5,014.10	-496.65	-838.61	-840.17	6.00	5.60	-6.17
5,200.00	24.66	101.54	5,060.05	-500.98	-819.38	-820.95	6.00	5.69	-4.82
5,250.00	27.53	99.60	5,104.95	-504.99	-797.76	-799.34	6.00	5.75	-3.87
5,300.00	30.43	98.01	5,148.68	-508.68	-773.82	-775.41	6.00	5.80	-3.19
5,350.00	33.35	96.66	5,191.13	-512.04	-747.62	-749.23	6.00	5.83	-2.68
5,400.00	36.27	95.52	5,232.18	-515.06	-719.24	-720.86	6.00	5.86	-2.30
5,450.00	39.21	94.52	5,271.71	-517.73	-688.76	-690.38	6.00	5.87	-2.00
5,500.00	42.16	93.64	5,309.62	-520.04	-656.25	-657.88	6.00	5.89	-1.76
5,550.00	45.11	92.85	5,345.81	-521.99	-621.81	-623.44	6.00	5.90	-1.57
5,600.00	48.06	92.14	5,380.17	-523.56	-585.53	-587.17	6.00	5.91	-1.42
5,650.00	51.02	91.50	5,412.61	-524.77	-547.51	-549.15	6.00	5.92	-1.29
5,700.00	53.99	90.90	5,443.04	-525.59	-507.85	-509.50	6.00	5.93	-1.19
5,750.00	56.95	90.35	5,471.38	-526.04	-466.67	-468.32	6.00	5.93	-1.10
5,801.37	60.00	89.82	5,498.24	-526.11	-422.88	-424.53	6.00	5.94	-1.03
5,900.00	60.00	89.82	5,547.55	-525.85	-337.47	-339.12	0.00	0.00	0.00
6,001.37	60.00	89.82	5,598.24	-525.58	-249.68	-251.33	0.00	0.00	0.00
6,050.00	64.86	89.82	5,620.74	-525.44	-206.58	-208.23	10.00	10.00	0.00
6,100.00	69.86	89.82	5,639.98	-525.30	-160.45	-162.10	10.00	10.00	0.00
6,150.00	74.86	89.82	5,655.12	-525.16	-112.82	-114.47	10.00	10.00	0.00
6,200.00	79.86	89.82	5,666.06	-525.01	-64.04	-65.69	10.00	10.00	0.00
6,250.00	84.86	89.82	5,672.70	-524.86	-14.50	-16.15	10.00	10.00	0.00
6,301.37	90.00	89.82	5,675.00	-524.70	36.80	35.15	10.00	10.00	0.00
TESORO 90H FTP: 1235' FNL, 100' FWL									
6,400.00	90.00	89.82	5,675.00	-524.40	135.43	133.78	0.00	0.00	0.00
6,500.00	90.00	89.82	5,675.00	-524.09	235.43	233.78	0.00	0.00	0.00
6,600.00	90.00	89.82	5,675.00	-523.79	335.43	333.78	0.00	0.00	0.00
6,700.00	90.00	89.82	5,675.00	-523.48	435.43	433.78	0.00	0.00	0.00
6,800.00	90.00	89.82	5,675.00	-523.17	535.43	533.78	0.00	0.00	0.00
6,900.00	90.00	89.82	5,675.00	-522.87	635.43	633.78	0.00	0.00	0.00
7,000.00	90.00	89.82	5,675.00	-522.56	735.43	733.78	0.00	0.00	0.00
7,100.00	90.00	89.82	5,675.00	-522.26	835.43	833.78	0.00	0.00	0.00
7,200.00	90.00	89.82	5,675.00	-521.95	935.42	933.78	0.00	0.00	0.00
7,300.00	90.00	89.82	5,675.00	-521.64	1,035.42	1,033.78	0.00	0.00	0.00
7,400.00	90.00	89.82	5,675.00	-521.34	1,135.42	1,133.78	0.00	0.00	0.00
7,500.00	90.00	89.82	5,675.00	-521.03	1,235.42	1,233.78	0.00	0.00	0.00
7,600.00	90.00	89.82	5,675.00	-520.73	1,335.42	1,333.78	0.00	0.00	0.00
7,700.00	90.00	89.82	5,675.00	-520.42	1,435.42	1,433.78	0.00	0.00	0.00
7,800.00	90.00	89.82	5,675.00	-520.11	1,535.42	1,533.78	0.00	0.00	0.00
7,900.00	90.00	89.82	5,675.00	-519.81	1,635.42	1,633.78	0.00	0.00	0.00
8,000.00	90.00	89.82	5,675.00	-519.50	1,735.42	1,733.78	0.00	0.00	0.00
8,100.00	90.00	89.82	5,675.00	-519.20	1,835.42	1,833.78	0.00	0.00	0.00
8,200.00	90.00	89.82	5,675.00	-518.89	1,935.42	1,933.78	0.00	0.00	0.00
8,300.00	90.00	89.82	5,675.00	-518.58	2,035.42	2,033.78	0.00	0.00	0.00
8,400.00	90.00	89.82	5,675.00	-518.28	2,135.42	2,133.78	0.00	0.00	0.00
8,500.00	90.00	89.82	5,675.00	-517.97	2,235.42	2,233.78	0.00	0.00	0.00
8,600.00	90.00	89.82	5,675.00	-517.66	2,335.42	2,333.78	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well 90H
Company:	SPUR ENERGY PARTNERS, LLC	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Project:	EDDY COUNTY, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site:	TESORO 20 FEDERAL COM	North Reference:	Grid
Well:	90H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Planned 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)
8,700.00	90.00	89.82	5,675.00	-517.36	2,435.42	2,433.78	0.00	0.00	0.00
8,800.00	90.00	89.82	5,675.00	-517.05	2,535.42	2,533.78	0.00	0.00	0.00
8,900.00	90.00	89.82	5,675.00	-516.75	2,635.42	2,633.78	0.00	0.00	0.00
9,000.00	90.00	89.82	5,675.00	-516.44	2,735.42	2,733.78	0.00	0.00	0.00
9,100.00	90.00	89.82	5,675.00	-516.13	2,835.42	2,833.78	0.00	0.00	0.00
9,200.00	90.00	89.82	5,675.00	-515.83	2,935.42	2,933.78	0.00	0.00	0.00
9,300.00	90.00	89.82	5,675.00	-515.52	3,035.41	3,033.78	0.00	0.00	0.00
9,400.00	90.00	89.82	5,675.00	-515.22	3,135.41	3,133.78	0.00	0.00	0.00
9,500.00	90.00	89.82	5,675.00	-514.91	3,235.41	3,233.78	0.00	0.00	0.00
9,600.00	90.00	89.82	5,675.00	-514.60	3,335.41	3,333.78	0.00	0.00	0.00
9,700.00	90.00	89.82	5,675.00	-514.30	3,435.41	3,433.78	0.00	0.00	0.00
9,800.00	90.00	89.82	5,675.00	-513.99	3,535.41	3,533.78	0.00	0.00	0.00
9,900.00	90.00	89.82	5,675.00	-513.69	3,635.41	3,633.78	0.00	0.00	0.00
10,000.00	90.00	89.82	5,675.00	-513.38	3,735.41	3,733.78	0.00	0.00	0.00
10,100.00	90.00	89.82	5,675.00	-513.07	3,835.41	3,833.78	0.00	0.00	0.00
10,200.00	90.00	89.82	5,675.00	-512.77	3,935.41	3,933.78	0.00	0.00	0.00
10,300.00	90.00	89.82	5,675.00	-512.46	4,035.41	4,033.78	0.00	0.00	0.00
10,400.00	90.00	89.82	5,675.00	-512.16	4,135.41	4,133.78	0.00	0.00	0.00
10,500.00	90.00	89.82	5,675.00	-511.85	4,235.41	4,233.78	0.00	0.00	0.00
10,600.00	90.00	89.82	5,675.00	-511.54	4,335.41	4,333.78	0.00	0.00	0.00
10,700.00	90.00	89.82	5,675.00	-511.24	4,435.41	4,433.78	0.00	0.00	0.00
10,800.00	90.00	89.82	5,675.00	-510.93	4,535.41	4,533.78	0.00	0.00	0.00
10,900.00	90.00	89.82	5,675.00	-510.63	4,635.41	4,633.78	0.00	0.00	0.00
11,000.00	90.00	89.82	5,675.00	-510.32	4,735.41	4,733.78	0.00	0.00	0.00
11,100.00	90.00	89.82	5,675.00	-510.01	4,835.41	4,833.78	0.00	0.00	0.00
11,200.00	90.00	89.82	5,675.00	-509.71	4,935.41	4,933.78	0.00	0.00	0.00
11,300.00	90.00	89.82	5,675.00	-509.40	5,035.41	5,033.78	0.00	0.00	0.00
11,381.20	90.00	89.82	5,675.00	-509.15	5,116.60	5,114.98	0.00	0.00	0.00
TESORO 90H LTP: 1235' FNL, 100' FEL									
11,400.00	90.00	89.82	5,675.00	-509.10	5,135.40	5,133.78	0.00	0.00	0.00
11,431.20	90.00	89.82	5,675.00	-509.00	5,166.60	5,164.98	0.00	0.00	0.00
TESORO 90H BHL: 1235' FNL, 50' FEL									

Planning Report

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well 90H
Company:	SPUR ENERGY PARTNERS, LLC	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Project:	EDDY COUNTY, NM (NAD 83 - NME)	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site:	TESORO 20 FEDERAL COM	North Reference:	Grid
Well:	90H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Design Targets										
Target Name										
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting			
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	Latitude	Longitude	
TESORO 90H SHL: 7	0.00	0.00	0.00	0.00	0.00	664,150.30	642,951.90	32.82534	-104.00254	
- plan hits target center										
- Point										
TESORO 90H KOP: 4	0.00	0.00	4,471.05	-431.55	-881.58	663,718.75	642,070.33	32.82416	-104.00541	
- plan hits target center										
- Point										
TESORO 90H LTP: 1	0.00	0.00	5,675.00	-509.20	5,116.60	663,641.10	648,068.50	32.82390	-103.98589	
- plan misses target center by 0.05usft at 11381.19usft MD (5675.00 TVD, -509.15 N, 5116.60 E)										
- Point										
TESORO 90H FTP: 1	0.00	0.00	5,675.00	-524.70	36.80	663,625.60	642,988.70	32.82390	-104.00242	
- plan hits target center										
- Point										
TESORO 90H BHL: 1	0.00	0.00	5,675.00	-509.00	5,166.60	663,641.30	648,118.50	32.82390	-103.98572	
- plan hits target center										
- Point										

SPUR ENERGY PARTNERS, LLC

**EDDY COUNTY, NM (NAD 83 - NME)
TESORO 20 FEDERAL COM
90H**

**Wellbore #1
PERMIT**

Anticollision Report

05 August, 2024

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Reference	PERMIT
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD Interval 100.00usft
Depth Range:	Unlimited
Results Limited by:	Maximum centre distance of 4,999.99usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program		Date	8/5/2024		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	11,431.20	PERMIT (Wellbore #1)	MWD+IFR1+SAG+FDIR	OWSG MWD + IFR1 + Sag + FDIR Correction	

Summary						
Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
OCHO_TESORO OFFSETS						
BURCH A #31 - Wellbore #1 - Wellbore #1	3,933.19	3,410.00	2,612.04	2,533.39	33.210	CC, ES, SF
BURCH KEELY UNIT #192H - Wellbore #1 - Wellbore #1	4,995.19	8,640.68	215.77	72.40	1.505	CC
BURCH KEELY UNIT #192H - Wellbore #1 - Wellbore #1	5,000.00	8,641.80	215.82	72.14	1.502	ES, SF
BURCH KEELY UNIT #225 - Wellbore #1 - Wellbore #1	1,708.56	1,667.93	491.79	452.99	12.675	CC
BURCH KEELY UNIT #225 - Wellbore #1 - Wellbore #1	2,000.00	1,950.02	496.08	450.14	10.798	ES
BURCH KEELY UNIT #225 - Wellbore #1 - Wellbore #1	5,300.00	5,065.00	958.54	834.00	7.697	SF
BURCH KEELY UNIT #242 - Wellbore #1 - Wellbore #1	5,100.00	4,820.00	646.97	525.09	5.308	ES, SF
BURCH KEELY UNIT #242 - Wellbore #1 - Wellbore #1	5,200.00	4,820.00	642.53	525.58	5.494	CC
BURCH KEELY UNIT #270 - Wellbore #1 - Wellbore #1	5,300.00	4,870.00	2,429.25	2,298.32	18.553	SF
BURCH KEELY UNIT #270 - Wellbore #1 - Wellbore #1	5,458.54	4,870.00	2,424.78	2,294.39	18.596	CC, ES
BURCH KEELY UNIT #361 - Wellbore #1 - Wellbore #1	2,583.62	2,513.04	109.47	41.02	1.599	CC
BURCH KEELY UNIT #361 - Wellbore #1 - Wellbore #1	2,699.99	2,625.25	111.23	40.03	1.562	ES, SF
BURCH KEELY UNIT #656 - Wellbore #1 - Wellbore #1	4,875.78	4,656.00	825.77	720.66	7.856	CC, ES, SF
BURCH KEELY UNIT #788 - Wellbore #1 - Wellbore #1	5,200.00	4,768.00	1,785.16	1,748.96	49.311	SF
BURCH KEELY UNIT #788 - Wellbore #1 - Wellbore #1	5,217.39	4,768.00	1,785.09	1,748.90	49.317	CC, ES
BURCH KEELY UNIT #962H - Wellbore #1 - Wellbore #1	4,940.91	9,507.80	831.85	665.66	5.005	CC, ES
BURCH KEELY UNIT #962H - Wellbore #1 - Wellbore #1	5,000.00	9,516.80	833.72	666.36	4.982	SF
BURCH KEELY UNIT #964H - Wellbore #1 - Wellbore #1	5,080.80	9,553.56	478.31	309.97	2.841	CC, ES, SF
BURCH KEELY UNIT #965H - Wellbore #1 - Wellbore #1	5,143.73	5,085.95	1,086.84	1,047.90	27.914	CC, ES, SF
BURCH KEELY UNIT #966H - Wellbore #1 - Wellbore #1	5,218.31	9,084.90	1,794.84	1,640.40	11.622	CC, ES
BURCH KEELY UNIT #966H - Wellbore #1 - Wellbore #1	5,400.00	9,173.89	1,802.79	1,646.89	11.564	SF
BURCH KEELY UNIT 19 FEDERAL #196H - Wellbore #1	5,173.27	8,808.82	2,404.27	2,255.40	16.151	CC
BURCH KEELY UNIT 19 FEDERAL #196H - Wellbore #1	5,200.00	8,818.89	2,404.43	2,255.31	16.124	ES
BURCH KEELY UNIT 19 FEDERAL #196H - Wellbore #1	5,799.99	9,215.19	2,466.94	2,308.94	15.613	SF
BURCH-FEDERAL A #10 - Wellbore #1 - Wellbore #1	2,628.80	2,545.51	108.41	2.65	1.025	Level 2, CC
BURCH-FEDERAL A #10 - Wellbore #1 - Wellbore #1	2,699.99	2,614.44	108.99	0.22	1.002	Level 2, ES, SF
BURCH-FEDERAL A #11 - Wellbore #1 - Wellbore #1	3,598.52	3,262.00	1,968.91	1,831.38	14.317	CC, ES, SF
BURCH-FEDERAL A #6 - Wellbore #1 - Wellbore #1	3,400.00	3,195.00	994.23	860.27	7.422	SF
BURCH-FEDERAL A #6 - Wellbore #1 - Wellbore #1	3,464.77	3,195.00	992.12	858.94	7.449	CC, ES
JENKINS B FEDERAL #18 - Wellbore #1 - Wellbore #1	300.00	296.00	512.87	508.34	113.350	CC
JENKINS B FEDERAL #18 - Wellbore #1 - Wellbore #1	400.00	396.80	514.40	507.57	75.307	ES
JENKINS B FEDERAL #18 - Wellbore #1 - Wellbore #1	6,611.80	5,671.61	903.89	770.89	6.796	SF
MCINTIRE A #8 - Wellbore #1 - Wellbore #1	9,814.00	5,661.19	2,396.91	2,181.57	11.131	CC, ES
MCINTIRE A #8 - Wellbore #1 - Wellbore #1	10,000.00	5,661.19	2,404.07	2,186.90	11.070	SF
MCINTYRE A #17 - Wellbore #1 - Wellbore #1	9,839.55	5,052.00	2,352.04	2,173.88	13.202	CC, ES
MCINTYRE A #17 - Wellbore #1 - Wellbore #1	10,100.00	5,052.00	2,366.42	2,185.75	13.098	SF
MCINTYRE A EAST FEDERAL #20 - Wellbore #1 - Wellbore #1	10,945.63	5,659.53	2,463.19	2,279.38	13.401	CC, ES

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
OCHO_TESORO OFFSETS						
MCINTYRE A EAST FEDERAL #20 - Wellbore #1 - Wellbore #1	11,200.00	5,659.52	2,476.29	2,290.00	13.293	SF
MCINTYRE A FEDERAL #14 - Wellbore #1 - Wellbore #1	10,628.89	5,141.00	1,688.92	1,442.00	6.840	CC, ES
MCINTYRE A FEDERAL #14 - Wellbore #1 - Wellbore #1	10,700.00	5,141.00	1,690.41	1,442.76	6.826	SF
MCINTYRE B #9 - Wellbore #1 - Wellbore #1	7,285.08	5,657.39	2,395.63	2,239.91	15.384	CC
MCINTYRE B #9 - Wellbore #1 - Wellbore #1	7,300.00	5,657.39	2,395.68	2,239.85	15.374	ES
MCINTYRE B #9 - Wellbore #1 - Wellbore #1	7,500.00	5,657.39	2,405.25	2,247.98	15.293	SF
MCINTYRE E #8 - Wellbore #1 - Wellbore #1	8,435.36	5,020.00	2,481.40	2,321.28	15.497	CC, ES
MCINTYRE E #8 - Wellbore #1 - Wellbore #1	8,800.00	5,020.00	2,508.05	2,344.69	15.353	SF
MCINTYRE E FEDERAL #5 - Wellbore #1 - Wellbore #1	7,835.22	5,542.00	2,398.44	2,238.67	15.011	CC, ES
MCINTYRE E FEDERAL #5 - Wellbore #1 - Wellbore #1	8,100.00	5,542.00	2,413.02	2,251.06	14.899	SF
MCINTYRE W D 'C' #7 - Wellbore #1 - Wellbore #1	11,137.12	5,037.00	1,243.06	1,171.95	17.482	CC, ES
MCINTYRE W D 'C' #7 - Wellbore #1 - Wellbore #1	11,300.00	5,037.00	1,253.68	1,181.25	17.309	SF
MCINTYRE-FEDERAL A #4 - Wellbore #1 - Wellbore #1	11,060.67	5,661.00	2,400.51	2,115.94	8.436	CC
MCINTYRE-FEDERAL A #4 - Wellbore #1 - Wellbore #1	11,100.00	5,661.00	2,400.83	2,115.84	8.424	ES
MCINTYRE-FEDERAL A #4 - Wellbore #1 - Wellbore #1	11,200.00	5,661.00	2,404.55	2,118.55	8.408	SF
THUNDER ROAD FEDERAL #7 - Wellbore #1 - Wellbore #1	9,163.01	5,692.36	904.11	748.58	5.813	CC, ES
THUNDER ROAD FEDERAL #7 - Wellbore #1 - Wellbore #1	9,200.00	5,692.36	904.86	749.02	5.806	SF
THUNDER ROAD FEDERAL #8 - Wellbore #1 - Wellbore #1	9,152.94	5,676.25	442.27	282.10	2.761	CC, ES, SF
W D MCINTYRE A #7 - Wellbore #1 - Wellbore #1	8,165.29	5,667.00	2,396.07	2,140.36	9.370	CC
W D MCINTYRE A #7 - Wellbore #1 - Wellbore #1	8,200.00	5,667.00	2,396.32	2,140.30	9.360	ES
W D MCINTYRE A #7 - Wellbore #1 - Wellbore #1	8,400.00	5,667.00	2,407.53	2,149.79	9.341	SF
W.D. MCINTYRE C #8 - Wellbore #1 - Wellbore #1	11,132.83	5,693.65	243.49	35.45	1.170	Level 2, CC, ES, SF
W.D. MCINTYRE C #9 - Wellbore #1 - Wellbore #1	10,472.15	5,711.06	902.85	721.91	4.990	CC, ES
W.D. MCINTYRE C #9 - Wellbore #1 - Wellbore #1	10,500.00	5,711.06	903.28	722.10	4.985	SF
TESORO 20 FEDERAL COM						
70H - Wellbore #1 - PERMIT	300.00	300.00	20.00	18.14	10.729	CC, ES
70H - Wellbore #1 - PERMIT	600.00	599.50	27.45	23.48	6.913	SF
71H - Wellbore #1 - PERMIT	300.00	300.00	20.00	18.14	10.729	CC, ES
71H - Wellbore #1 - PERMIT	11,431.20	11,165.23	744.67	618.95	5.923	SF

Offset Design: OCHO_TESORO OFFSETS - BURCH A #31 - Wellbore #1 - Wellbore #1

Survey Program: 498-INC-ONLY													Offset Site Error: 0.00 usft				
Reference				Offset		Semi Major Axis			Offset Wellbore Centre			Rule Assigned:				Offset Well Error: 0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning				
0.00	0.00	0.00	0.00	0.00	0.00	-164.10	-2,922.21	-832.56	3,038.70								
100.00	100.00	65.00	65.00	0.29	0.56	-164.10	-2,922.21	-832.56	3,038.50	3,037.65	0.85	3,570.328					
200.00	200.00	165.00	165.00	0.65	1.43	-164.10	-2,922.21	-832.56	3,038.50	3,036.42	2.08	1,462.496					
300.00	300.00	265.00	265.00	1.00	2.30	-164.10	-2,922.21	-832.56	3,038.50	3,035.19	3.30	919.592					
400.00	399.98	364.98	364.98	1.35	3.17	-55.24	-2,922.21	-832.56	3,037.50	3,032.98	4.52	671.927					
500.00	499.84	464.84	464.84	1.70	4.04	-55.37	-2,922.21	-832.56	3,034.52	3,028.79	5.73	529.235					
600.00	599.45	564.45	564.45	2.05	5.52	-55.59	-2,922.21	-832.56	3,029.57	3,022.00	7.57	400.114					
700.00	698.70	663.70	663.70	2.41	7.31	-55.89	-2,922.21	-832.56	3,022.67	3,012.95	9.72	311.061					
800.00	797.47	761.81	761.81	2.77	9.08	-56.28	-2,921.95	-832.56	3,013.62	3,001.77	11.85	254.396					
900.00	895.62	857.43	857.43	3.14	10.80	-56.75	-2,922.02	-832.56	3,003.02	2,989.09	13.93	215.509					
1,000.00	993.06	952.37	952.37	3.52	12.51	-57.30	-2,922.16	-832.56	2,990.70	2,974.69	16.02	186.741					
1,100.00	1,089.87	1,054.87	1,054.87	3.91	14.42	-57.79	-2,922.21	-832.56	2,977.02	2,958.72	18.30	162.663					
1,200.00	1,186.65	1,151.66	1,151.65	4.30	16.25	-58.19	-2,922.21	-832.56	2,963.37	2,942.86	20.50	144.542					
1,300.00	1,283.44	1,246.49	1,246.48	4.69	18.04	-58.59	-2,921.71	-832.56	2,949.38	2,926.71	22.67	130.110					

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH A #31 - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 498-INC-ONLY		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
1,400.00	1,380.22	1,338.38	1,338.37	5.09	19.77	-58.98	-2,921.85	-832.56	2,936.18	2,911.39	24.78	118.478	
1,500.00	1,477.00	1,430.29	1,430.29	5.49	21.50	-59.37	-2,922.15	-832.56	2,923.29	2,896.39	26.90	108.675	
1,600.00	1,573.78	1,538.79	1,538.78	5.89	23.66	-59.84	-2,922.21	-832.56	2,910.29	2,880.85	29.44	98.850	
1,700.00	1,670.56	1,635.57	1,635.56	6.29	25.60	-60.25	-2,922.21	-832.56	2,897.41	2,865.64	31.77	91.206	
1,800.00	1,767.35	1,729.67	1,729.66	6.69	27.48	-60.66	-2,921.41	-832.56	2,883.92	2,849.87	34.04	84.717	
1,900.00	1,864.13	1,819.80	1,819.79	7.10	29.29	-61.06	-2,921.60	-832.56	2,871.57	2,835.33	36.24	79.241	
2,000.00	1,960.91	1,909.97	1,909.95	7.50	31.09	-61.46	-2,922.01	-832.56	2,859.61	2,821.18	38.44	74.397	
2,100.00	2,057.69	2,022.71	2,022.69	7.90	33.47	-61.97	-2,922.21	-832.56	2,847.55	2,806.35	41.21	69.105	
2,200.00	2,154.47	2,119.50	2,119.47	8.31	35.55	-62.41	-2,922.21	-832.56	2,835.51	2,791.83	43.68	64.911	
2,300.00	2,251.26	2,214.12	2,214.09	8.71	37.59	-62.84	-2,921.13	-832.56	2,822.58	2,776.46	46.12	61.206	
2,400.00	2,348.04	2,302.33	2,302.29	9.12	39.49	-63.24	-2,921.34	-832.56	2,811.10	2,762.69	48.41	58.066	
2,500.00	2,444.82	2,390.59	2,390.55	9.52	41.39	-63.65	-2,921.81	-832.56	2,800.10	2,749.39	50.71	55.218	
2,600.00	2,541.62	2,506.67	2,506.62	9.93	43.95	-58.60	-2,922.21	-832.56	2,788.35	2,734.68	53.67	51.955	
2,699.99	2,638.44	2,603.48	2,603.44	10.33	46.13	-51.12	-2,922.21	-832.56	2,773.65	2,717.41	56.24	49.316	
2,800.00	2,735.22	2,698.08	2,698.02	10.74	48.27	-50.87	-2,920.91	-832.56	2,756.11	2,697.35	58.76	46.903	
2,900.00	2,832.01	2,784.22	2,784.15	11.14	50.21	-51.22	-2,921.15	-832.56	2,740.26	2,679.17	61.09	44.855	
3,000.00	2,928.79	2,870.46	2,870.38	11.54	52.15	-51.58	-2,921.73	-832.56	2,724.92	2,661.49	63.42	42.963	
3,100.00	3,025.57	2,990.66	2,990.57	11.95	54.87	-52.09	-2,922.21	-832.56	2,709.45	2,642.92	66.53	40.723	
3,200.00	3,122.35	3,087.44	3,087.35	12.35	57.07	-52.51	-2,922.21	-832.56	2,693.75	2,624.63	69.13	38.969	
3,300.00	3,219.14	3,184.22	3,184.14	12.76	59.27	-52.92	-2,922.21	-832.56	2,678.19	2,606.48	71.72	37.343	
3,400.00	3,315.92	3,281.00	3,280.92	13.16	61.47	-53.35	-2,922.21	-832.56	2,662.78	2,588.47	74.31	35.832	
3,500.00	3,412.70	3,377.79	3,377.70	13.57	63.68	-53.78	-2,922.21	-832.56	2,647.52	2,570.61	76.91	34.424	
3,600.00	3,509.48	3,410.00	3,409.88	13.97	64.41	-53.92	-2,922.21	-832.56	2,633.21	2,555.17	78.03	33.744	
3,700.00	3,606.27	3,410.00	3,409.88	14.38	64.41	-53.92	-2,922.21	-832.56	2,622.43	2,544.09	78.34	33.473	
3,800.00	3,703.05	3,410.00	3,409.88	14.78	64.41	-53.92	-2,922.21	-832.56	2,615.43	2,536.89	78.55	33.297	
3,900.00	3,799.83	3,410.00	3,409.88	15.19	64.41	-53.92	-2,922.21	-832.56	2,612.25	2,533.61	78.64	33.216	
3,933.19	3,831.95	3,410.00	3,409.88	15.33	64.41	-53.92	-2,922.21	-832.56	2,612.04	2,533.39	78.65	33.210 CC, ES, SF	
4,000.00	3,896.61	3,410.00	3,409.88	15.60	64.41	-53.92	-2,922.21	-832.56	2,612.90	2,534.26	78.63	33.229	
4,100.00	3,993.40	3,410.00	3,409.88	16.00	64.41	-53.92	-2,922.21	-832.56	2,617.36	2,538.85	78.52	33.335	
4,200.00	4,090.18	3,410.00	3,409.88	16.41	64.41	-53.92	-2,922.21	-832.56	2,625.63	2,547.34	78.29	33.536	
4,300.00	4,186.96	3,410.00	3,409.88	16.82	64.41	-53.92	-2,922.21	-832.56	2,637.67	2,559.71	77.97	33.831	
4,400.00	4,283.74	3,410.00	3,409.88	17.23	64.41	-53.92	-2,922.21	-832.56	2,653.43	2,575.88	77.54	34.219	
4,500.00	4,380.53	3,410.00	3,409.88	17.63	64.41	-53.92	-2,922.21	-832.56	2,672.83	2,595.81	77.03	34.700	
4,600.00	4,477.31	3,410.00	3,409.88	18.04	64.41	-53.26	-2,922.21	-832.56	2,695.81	2,619.39	76.43	35.273	
4,700.00	4,575.17	3,410.00	3,409.88	18.43	64.41	-36.71	-2,922.21	-832.56	2,722.85	2,647.13	75.72	35.959	
4,800.00	4,674.18	3,410.00	3,409.88	18.77	64.41	-0.05	-2,922.21	-832.56	2,754.05	2,679.16	74.90	36.771	
4,900.00	4,773.25	3,410.00	3,409.88	19.07	64.41	38.59	-2,922.21	-832.56	2,788.95	2,714.97	73.98	37.700	
5,000.00	4,871.30	3,410.00	3,409.88	19.33	64.41	56.12	-2,922.21	-832.56	2,827.02	2,754.02	73.00	38.726	
5,100.00	4,967.25	3,410.00	3,409.88	19.57	64.41	62.82	-2,922.21	-832.56	2,867.74	2,795.74	72.00	39.831	
5,200.00	5,060.05	3,410.00	3,409.88	19.79	64.41	65.10	-2,922.21	-832.56	2,910.55	2,839.54	71.01	40.990	
5,300.00	5,148.68	3,410.00	3,409.88	20.00	64.41	65.31	-2,922.21	-832.56	2,954.91	2,884.85	70.06	42.179	
5,400.00	5,232.18	3,410.00	3,409.88	20.19	64.41	64.40	-2,922.21	-832.56	3,000.27	2,931.10	69.18	43.370	
5,500.00	5,309.62	3,410.00	3,409.88	20.38	64.41	62.87	-2,922.21	-832.56	3,046.11	2,977.71	68.40	44.531	
5,600.00	5,380.17	3,410.00	3,409.88	20.57	64.41	60.99	-2,922.21	-832.56	3,091.91	3,024.15	67.76	45.631	
5,700.00	5,443.04	3,410.00	3,409.88	20.77	64.41	58.92	-2,922.21	-832.56	3,137.18	3,069.91	67.27	46.638	
5,799.99	5,497.55	3,410.00	3,409.88	20.98	64.41	56.79	-2,922.21	-832.56	3,181.45	3,114.50	66.94	47.524	
5,900.00	5,547.55	3,410.00	3,409.88	21.24	64.41	56.76	-2,922.21	-832.56	3,226.29	3,159.54	66.75	48.335	
5,999.99	5,597.55	3,410.00	3,409.88	21.54	64.41	56.76	-2,922.21	-832.56	3,273.56	3,206.95	66.61	49.145	
6,100.00	5,639.98	3,410.00	3,409.88	21.86	64.41	52.66	-2,922.21	-832.56	3,318.94	3,252.33	66.61	49.827	
6,200.00	5,666.06	3,410.00	3,409.88	22.21	64.41	49.44	-2,922.21	-832.56	3,357.21	3,290.35	66.86	50.213	
6,299.99	5,675.00	3,410.00	3,409.88	22.54	64.41	47.07	-2,922.21	-832.56	3,387.46	3,320.11	67.35	50.296	
6,400.00	5,675.00	3,410.00	3,409.88	22.90	64.41	47.04	-2,922.21	-832.56	3,414.67	3,346.68	67.99	50.221	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH A #31 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 498-INC-ONLY												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
6,500.00	5,675.00	3,410.00	3,409.88	23.32	64.41	47.04	-2,922.21	-832.56	3,444.56	3,375.88	68.68	50.153	
6,600.00	5,675.00	3,410.00	3,409.88	23.78	64.41	47.04	-2,922.21	-832.56	3,477.08	3,407.67	69.41	50.098	
6,700.00	5,675.00	3,410.00	3,409.88	24.29	64.41	47.04	-2,922.21	-832.56	3,512.14	3,441.98	70.16	50.059	
6,800.00	5,675.00	3,410.00	3,409.88	24.84	64.41	47.04	-2,922.21	-832.56	3,549.68	3,478.74	70.94	50.040	
6,900.00	5,675.00	3,410.00	3,409.88	25.43	64.41	47.04	-2,922.21	-832.56	3,589.61	3,517.88	71.73	50.043	
7,000.00	5,675.00	3,410.00	3,409.88	26.06	64.41	47.04	-2,922.21	-832.56	3,631.85	3,559.32	72.53	50.071	
7,100.00	5,675.00	3,410.00	3,409.88	26.72	64.41	47.04	-2,922.21	-832.56	3,676.33	3,602.99	73.34	50.126	
7,200.00	5,675.00	3,410.00	3,409.88	27.41	64.41	47.04	-2,922.21	-832.56	3,722.97	3,648.81	74.15	50.208	
7,300.00	5,675.00	3,410.00	3,409.88	28.13	64.41	47.04	-2,922.21	-832.56	3,771.68	3,696.72	74.96	50.319	
7,400.00	5,675.00	3,410.00	3,409.88	28.88	64.41	47.04	-2,922.21	-832.56	3,822.38	3,746.63	75.75	50.458	
7,500.00	5,675.00	3,410.00	3,409.88	29.66	64.41	47.04	-2,922.21	-832.56	3,875.01	3,798.46	76.54	50.626	
7,600.00	5,675.00	3,410.00	3,409.88	30.45	64.41	47.04	-2,922.21	-832.56	3,929.47	3,852.15	77.32	50.823	
7,700.00	5,675.00	3,410.00	3,409.88	31.27	64.41	47.04	-2,922.21	-832.56	3,985.70	3,907.62	78.08	51.048	
7,800.00	5,675.00	3,410.00	3,409.88	32.10	64.41	47.04	-2,922.21	-832.56	4,043.62	3,964.80	78.82	51.301	
7,900.00	5,675.00	3,410.00	3,409.88	32.95	64.41	47.04	-2,922.21	-832.56	4,103.16	4,023.61	79.55	51.581	
8,000.00	5,675.00	3,410.00	3,409.88	33.82	64.41	47.04	-2,922.21	-832.56	4,164.25	4,084.00	80.26	51.888	
8,100.00	5,675.00	3,410.00	3,409.88	34.70	64.41	47.04	-2,922.21	-832.56	4,226.83	4,145.88	80.94	52.219	
8,200.00	5,675.00	3,410.00	3,409.88	35.60	64.41	47.04	-2,922.21	-832.56	4,290.82	4,209.21	81.61	52.576	
8,300.00	5,675.00	3,410.00	3,409.88	36.51	64.41	47.04	-2,922.21	-832.56	4,356.17	4,273.91	82.26	52.956	
8,400.00	5,675.00	3,410.00	3,409.88	37.43	64.41	47.04	-2,922.21	-832.56	4,422.81	4,339.92	82.89	53.359	
8,500.00	5,675.00	3,410.00	3,409.88	38.37	64.41	47.04	-2,922.21	-832.56	4,490.69	4,407.20	83.50	53.783	
8,600.00	5,675.00	3,410.00	3,409.88	39.31	64.41	47.04	-2,922.21	-832.56	4,559.76	4,475.67	84.08	54.229	
8,700.00	5,675.00	3,410.00	3,409.88	40.26	64.41	47.04	-2,922.21	-832.56	4,629.95	4,545.30	84.65	54.694	
8,800.00	5,675.00	3,410.00	3,409.88	41.22	64.41	47.04	-2,922.21	-832.56	4,701.22	4,616.02	85.20	55.178	
8,900.00	5,675.00	3,410.00	3,409.88	42.19	64.41	47.04	-2,922.21	-832.56	4,773.53	4,687.80	85.73	55.681	
9,000.00	5,675.00	3,410.00	3,409.88	43.17	64.41	47.04	-2,922.21	-832.56	4,846.82	4,760.58	86.24	56.201	
9,100.00	5,675.00	3,410.00	3,409.88	44.15	64.41	47.04	-2,922.21	-832.56	4,921.05	4,834.31	86.73	56.737	
9,200.00	5,675.00	3,410.00	3,409.88	45.14	64.41	47.04	-2,922.21	-832.56	4,996.17	4,908.96	87.21	57.289	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #192H - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 4262-MWD+IGRF													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	9,103.00	4,839.46	0.00	139.72	-121.01	-253.41	-421.64	4,909.17				
100.00	100.00	9,103.00	4,839.46	0.29	139.72	-121.01	-253.41	-421.64	4,809.68	4,772.16	37.53	128.167	
200.00	200.00	9,103.00	4,839.46	0.65	139.72	-121.01	-253.41	-421.64	4,710.22	4,672.65	37.57	125.383	
300.00	300.00	9,103.00	4,839.46	1.00	139.72	-121.01	-253.41	-421.64	4,610.78	4,573.16	37.61	122.579	
400.00	399.98	9,103.00	4,839.46	1.35	139.72	-17.74	-253.41	-421.64	4,511.20	4,473.53	37.67	119.755	
500.00	499.84	9,103.00	4,839.46	1.70	139.72	-31.71	-253.41	-421.64	4,411.38	4,373.65	37.73	116.927	
600.00	599.45	9,103.00	4,839.46	2.05	139.72	-81.81	-253.41	-421.64	4,311.43	4,273.65	37.78	114.117	
700.00	698.70	9,103.00	4,839.46	2.41	139.72	-142.37	-253.41	-421.64	4,211.48	4,173.65	37.83	111.331	
800.00	797.47	9,103.00	4,839.46	2.77	139.72	-159.70	-253.41	-421.64	4,111.64	4,073.77	37.87	108.573	
900.00	895.62	9,103.00	4,839.46	3.14	139.72	-166.20	-253.41	-421.64	4,012.05	3,974.14	37.90	105.847	
1,000.00	993.06	9,103.00	4,839.46	3.52	139.72	-169.51	-253.41	-421.64	3,912.85	3,874.92	37.93	103.156	
1,100.00	1,089.87	9,103.00	4,839.46	3.91	139.72	-170.18	-253.41	-421.64	3,814.06	3,776.11	37.96	100.485	
1,200.00	1,186.65	9,103.00	4,839.46	4.30	139.72	-170.18	-253.41	-421.64	3,715.36	3,677.37	37.99	97.789	
1,300.00	1,283.44	9,103.00	4,839.46	4.69	139.72	-170.18	-253.41	-421.64	3,616.73	3,578.70	38.04	95.088	
1,400.00	1,380.22	9,103.00	4,839.46	5.09	139.72	-170.18	-253.41	-421.64	3,518.18	3,480.10	38.08	92.384	
1,500.00	1,477.00	9,103.00	4,839.46	5.49	139.72	-170.18	-253.41	-421.64	3,419.71	3,381.58	38.13	89.678	
1,600.00	1,573.78	9,103.00	4,839.46	5.89	139.72	-170.18	-253.41	-421.64	3,321.34	3,283.15	38.19	86.972	
1,700.00	1,670.56	9,103.00	4,839.46	6.29	139.72	-170.18	-253.41	-421.64	3,223.06	3,184.81	38.25	84.267	
1,800.00	1,767.35	9,103.00	4,839.46	6.69	139.72	-170.18	-253.41	-421.64	3,124.89	3,086.58	38.31	81.565	
1,900.00	1,864.13	9,103.00	4,839.46	7.10	139.72	-170.18	-253.41	-421.64	3,026.85	2,988.47	38.38	78.866	
2,000.00	1,960.91	9,103.00	4,839.46	7.50	139.72	-170.18	-253.41	-421.64	2,928.93	2,890.48	38.45	76.172	
2,100.00	2,057.69	9,103.00	4,839.46	7.90	139.72	-170.18	-253.41	-421.64	2,831.16	2,792.63	38.53	73.485	
2,200.00	2,154.47	9,103.00	4,839.46	8.31	139.72	-170.18	-253.41	-421.64	2,733.55	2,694.95	38.61	70.804	
2,300.00	2,251.26	9,103.00	4,839.46	8.71	139.72	-170.18	-253.41	-421.64	2,636.13	2,597.43	38.69	68.133	
2,400.00	2,348.04	9,103.00	4,839.46	9.12	139.72	-170.18	-253.41	-421.64	2,538.90	2,500.12	38.78	65.471	
2,500.00	2,444.82	9,103.00	4,839.46	9.52	139.72	-170.18	-253.41	-421.64	2,441.89	2,403.02	38.87	62.821	
2,600.00	2,541.62	9,103.00	4,839.46	9.93	139.72	-170.02	-253.41	-421.64	2,345.08	2,306.12	38.96	60.192	
2,699.99	2,638.44	9,103.00	4,839.46	10.33	139.72	-169.81	-253.41	-421.64	2,248.38	2,209.36	39.03	57.612	
2,800.00	2,735.22	9,103.00	4,839.46	10.74	139.72	-169.80	-253.41	-421.64	2,151.92	2,112.83	39.08	55.060	
2,900.00	2,832.01	9,103.00	4,839.46	11.14	139.72	-169.80	-253.41	-421.64	2,055.80	2,016.64	39.15	52.508	
3,000.00	2,928.79	9,080.03	4,840.62	11.54	139.00	-170.62	-254.61	-444.55	1,959.93	1,920.87	39.06	50.183	
3,100.00	3,025.57	9,056.25	4,841.82	11.95	138.26	-171.53	-255.85	-468.27	1,864.11	1,825.15	38.97	47.837	
3,200.00	3,122.35	9,013.80	4,843.84	12.35	136.93	-173.36	-258.00	-510.62	1,768.29	1,729.55	38.74	45.642	
3,300.00	3,219.14	8,974.14	4,845.40	12.76	135.69	-175.36	-259.81	-550.21	1,672.32	1,633.76	38.56	43.373	
3,400.00	3,315.92	8,937.53	4,846.55	13.16	134.55	-177.50	-261.31	-586.76	1,576.24	1,537.82	38.42	41.025	
3,500.00	3,412.70	8,904.20	4,847.37	13.57	133.50	-179.75	-262.53	-620.07	1,480.11	1,441.76	38.35	38.591	
3,600.00	3,509.48	8,872.61	4,847.95	13.97	132.51	177.80	-263.55	-651.63	1,383.98	1,345.62	38.36	36.079	
3,700.00	3,606.27	8,841.54	4,848.35	14.38	131.54	175.03	-264.43	-682.69	1,287.88	1,249.43	38.45	33.492	
3,800.00	3,703.05	8,810.74	4,848.52	14.78	130.57	171.88	-265.16	-713.48	1,191.84	1,153.17	38.67	30.822	
3,900.00	3,799.83	8,782.00	4,848.47	15.19	129.67	168.50	-265.72	-742.21	1,095.92	1,056.84	39.08	28.043	
4,000.00	3,896.61	8,755.01	4,848.25	15.60	128.82	164.90	-266.14	-769.20	1,000.22	960.45	39.77	25.151	
4,100.00	3,993.40	8,729.19	4,847.87	16.00	128.01	161.01	-266.45	-795.02	904.87	864.01	40.85	22.149	
4,200.00	4,090.18	8,705.06	4,847.36	16.41	127.25	156.95	-266.68	-819.14	810.03	767.50	42.53	19.044	
4,300.00	4,186.96	8,682.47	4,846.74	16.82	126.54	152.77	-266.83	-841.72	715.99	670.88	45.11	15.873	
4,400.00	4,283.74	8,664.00	4,846.14	17.23	125.96	149.06	-266.91	-860.18	623.17	574.09	49.08	12.697	
4,500.00	4,380.53	8,645.79	4,845.53	17.63	125.39	145.16	-266.96	-878.38	532.35	477.22	55.13	9.657	
4,600.00	4,477.31	8,629.26	4,845.03	18.04	124.87	141.59	-266.97	-894.90	444.81	380.41	64.41	6.906	
4,700.00	4,575.17	8,617.70	4,844.70	18.43	124.50	148.39	-266.96	-906.45	361.97	283.29	78.68	4.601	
4,800.00	4,674.18	8,615.67	4,844.65	18.77	124.44	179.96	-266.95	-908.49	288.51	188.59	99.92	2.887	
4,900.00	4,773.25	8,623.58	4,844.87	19.07	124.69	-140.97	-266.96	-900.58	234.85	108.46	126.39	1.858	
4,995.19	4,866.62	8,640.68	4,845.37	19.32	125.23	-118.35	-266.96	-883.48	215.77	72.40	143.37	1.505 CC	
5,000.00	4,871.30	8,641.80	4,845.41	19.33	125.26	-117.42	-266.96	-882.37	215.82	72.14	143.68	1.502 ES, SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #192H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 4262-MWD+IGRF		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,100.00	4,967.25	8,670.35	4,846.36	19.57	126.16	-99.53	-266.89	-853.84	237.59	99.78	137.81	1.724	
5,200.00	5,060.05	8,706.90	4,847.40	19.79	127.31	-82.77	-266.66	-817.30	288.12	167.36	120.76	2.386	
5,300.00	5,148.68	8,750.47	4,848.20	20.00	128.68	-67.32	-266.20	-773.74	352.24	246.97	105.27	3.346	
5,400.00	5,232.18	8,800.19	4,848.53	20.19	130.24	-54.46	-265.38	-724.03	420.77	326.83	93.94	4.479	
5,500.00	5,309.62	8,854.00	4,848.21	20.38	131.93	-44.71	-264.09	-670.23	488.98	402.94	86.03	5.684	
5,600.00	5,380.17	8,917.55	4,847.06	20.57	133.92	-37.27	-262.06	-606.73	554.15	473.48	80.67	6.870	
5,700.00	5,443.04	8,984.08	4,845.04	20.77	136.00	-31.96	-259.37	-540.28	614.60	537.62	76.98	7.984	
5,799.99	5,497.55	9,055.30	4,841.87	20.98	138.23	-28.11	-255.90	-469.22	669.31	594.78	74.53	8.981	
5,900.00	5,547.55	9,103.00	4,839.46	21.24	139.72	-27.11	-253.41	-421.64	721.80	649.55	72.26	9.989	
5,999.99	5,597.55	9,103.00	4,839.46	21.54	139.72	-27.11	-253.41	-421.64	782.13	712.97	69.16	11.309	
6,100.00	5,639.98	9,103.00	4,839.46	21.86	139.72	-23.75	-253.41	-421.64	844.37	777.90	66.46	12.705	
6,200.00	5,666.06	9,103.00	4,839.46	22.21	139.72	-21.10	-253.41	-421.64	901.41	837.07	64.34	14.011	
6,299.99	5,675.00	9,103.00	4,839.46	22.54	139.72	-19.06	-253.41	-421.64	952.60	890.00	62.61	15.215	
6,400.00	5,675.00	9,103.00	4,839.46	22.90	139.72	-19.03	-253.41	-421.64	1,004.35	943.39	60.96	16.475	
6,500.00	5,675.00	9,103.00	4,839.46	23.32	139.72	-19.03	-253.41	-421.64	1,063.00	1,003.80	59.20	17.957	
6,600.00	5,675.00	9,103.00	4,839.46	23.78	139.72	-19.03	-253.41	-421.64	1,127.48	1,070.09	57.39	19.646	
6,700.00	5,675.00	9,103.00	4,839.46	24.29	139.72	-19.03	-253.41	-421.64	1,196.86	1,141.24	55.61	21.522	
6,800.00	5,675.00	9,103.00	4,839.46	24.84	139.72	-19.03	-253.41	-421.64	1,270.32	1,216.42	53.90	23.567	
6,900.00	5,675.00	9,103.00	4,839.46	25.43	139.72	-19.03	-253.41	-421.64	1,347.20	1,294.92	52.29	25.766	
7,000.00	5,675.00	9,103.00	4,839.46	26.06	139.72	-19.03	-253.41	-421.64	1,426.96	1,376.18	50.78	28.101	
7,100.00	5,675.00	9,103.00	4,839.46	26.72	139.72	-19.03	-253.41	-421.64	1,509.12	1,459.74	49.38	30.559	
7,200.00	5,675.00	9,103.00	4,839.46	27.41	139.72	-19.03	-253.41	-421.64	1,593.33	1,545.23	48.10	33.127	
7,300.00	5,675.00	9,103.00	4,839.46	28.13	139.72	-19.03	-253.41	-421.64	1,679.27	1,632.35	46.92	35.791	
7,400.00	5,675.00	9,103.00	4,839.46	28.88	139.72	-19.03	-253.41	-421.64	1,766.69	1,720.85	45.84	38.542	
7,500.00	5,675.00	9,103.00	4,839.46	29.66	139.72	-19.03	-253.41	-421.64	1,855.38	1,810.53	44.85	41.368	
7,600.00	5,675.00	9,103.00	4,839.46	30.45	139.72	-19.03	-253.41	-421.64	1,945.17	1,901.22	43.95	44.261	
7,700.00	5,675.00	9,103.00	4,839.46	31.27	139.72	-19.03	-253.41	-421.64	2,035.91	1,992.79	43.12	47.211	
7,800.00	5,675.00	9,103.00	4,839.46	32.10	139.72	-19.03	-253.41	-421.64	2,127.48	2,085.11	42.37	50.212	
7,900.00	5,675.00	9,103.00	4,839.46	32.95	139.72	-19.03	-253.41	-421.64	2,219.78	2,178.10	41.68	53.257	
8,000.00	5,675.00	9,103.00	4,839.46	33.82	139.72	-19.03	-253.41	-421.64	2,312.72	2,271.67	41.05	56.338	
8,100.00	5,675.00	9,103.00	4,839.46	34.70	139.72	-19.03	-253.41	-421.64	2,406.23	2,365.75	40.47	59.450	
8,200.00	5,675.00	9,103.00	4,839.46	35.60	139.72	-19.03	-253.41	-421.64	2,500.24	2,460.29	39.95	62.589	
8,300.00	5,675.00	9,103.00	4,839.46	36.51	139.72	-19.03	-253.41	-421.64	2,594.69	2,555.23	39.46	65.749	
8,400.00	5,675.00	9,103.00	4,839.46	37.43	139.72	-19.03	-253.41	-421.64	2,689.55	2,650.53	39.02	68.926	
8,500.00	5,675.00	9,103.00	4,839.46	38.37	139.72	-19.03	-253.41	-421.64	2,784.77	2,746.15	38.61	72.116	
8,600.00	5,675.00	9,103.00	4,839.46	39.31	139.72	-19.03	-253.41	-421.64	2,880.31	2,842.07	38.24	75.317	
8,700.00	5,675.00	9,103.00	4,839.46	40.26	139.72	-19.03	-253.41	-421.64	2,976.14	2,938.24	37.90	78.525	
8,800.00	5,675.00	9,103.00	4,839.46	41.22	139.72	-19.03	-253.41	-421.64	3,072.24	3,034.66	37.59	81.737	
8,900.00	5,675.00	9,103.00	4,839.46	42.19	139.72	-19.03	-253.41	-421.64	3,168.58	3,131.28	37.30	84.951	
9,000.00	5,675.00	9,103.00	4,839.46	43.17	139.72	-19.03	-253.41	-421.64	3,265.14	3,228.11	37.03	88.165	
9,100.00	5,675.00	9,103.00	4,839.46	44.15	139.72	-19.03	-253.41	-421.64	3,361.91	3,325.11	36.79	91.376	
9,200.00	5,675.00	9,103.00	4,839.46	45.14	139.72	-19.03	-253.41	-421.64	3,458.85	3,422.28	36.57	94.583	
9,300.00	5,675.00	9,103.00	4,839.46	46.14	139.72	-19.03	-253.41	-421.64	3,555.97	3,519.60	36.37	97.785	
9,400.00	5,675.00	9,103.00	4,839.46	47.15	139.72	-19.03	-253.41	-421.64	3,653.24	3,617.06	36.18	100.980	
9,500.00	5,675.00	9,103.00	4,839.46	48.15	139.72	-19.03	-253.41	-421.64	3,750.65	3,714.65	36.01	104.167	
9,600.00	5,675.00	9,103.00	4,839.46	49.17	139.72	-19.03	-253.41	-421.64	3,848.20	3,812.35	35.85	107.345	
9,700.00	5,675.00	9,103.00	4,839.46	50.19	139.72	-19.03	-253.41	-421.64	3,945.87	3,910.17	35.71	110.513	
9,800.00	5,675.00	9,103.00	4,839.46	51.21	139.72	-19.03	-253.41	-421.64	4,043.66	4,008.08	35.57	113.669	
9,900.00	5,675.00	9,103.00	4,839.46	52.24	139.72	-19.03	-253.41	-421.64	4,141.55	4,106.09	35.45	116.814	
10,000.00	5,675.00	9,103.00	4,839.46	53.27	139.72	-19.03	-253.41	-421.64	4,239.53	4,204.19	35.35	119.946	
10,100.00	5,675.00	9,103.00	4,839.46	54.31	139.72	-19.03	-253.41	-421.64	4,337.61	4,302.37	35.25	123.066	
10,200.00	5,675.00	9,103.00	4,839.46	55.34	139.72	-19.03	-253.41	-421.64	4,435.78	4,400.62	35.16	126.172	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design:OCHO_TESORO OFFSETS - BURCH KEELY UNIT #192H - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 4262-MWD+IGRF													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
10,300.00	5,675.00	9,103.00	4,839.46	56.39	139.72	-19.03	-253.41	-421.64	4,534.03	4,498.95	35.08	129.264		
10,400.00	5,675.00	9,103.00	4,839.46	57.43	139.72	-19.03	-253.41	-421.64	4,632.35	4,597.34	35.00	132.341		
10,500.00	5,675.00	9,103.00	4,839.46	58.48	139.72	-19.03	-253.41	-421.64	4,730.74	4,695.80	34.94	135.404		
10,600.00	5,675.00	9,103.00	4,839.46	59.53	139.72	-19.03	-253.41	-421.64	4,829.20	4,794.32	34.88	138.452		
10,700.00	5,675.00	9,103.00	4,839.46	60.59	139.72	-19.03	-253.41	-421.64	4,927.72	4,892.89	34.83	141.485		

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #225 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 432-INC-ONLY													0.00 usft
Rule Assigned:													Offset Well Error:
													0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-47.76	377.43	-415.68	561.57				
100.00	100.00	89.00	89.00	0.29	1.10	-47.76	377.43	-415.68	561.47	560.07	1.39	403.673	
200.00	200.00	189.00	189.00	0.65	2.35	-47.76	377.43	-415.68	561.47	558.48	2.99	187.785	
300.00	300.00	289.00	289.00	1.00	3.59	-47.76	377.43	-415.68	561.47	556.88	4.59	122.351	
400.00	399.98	388.98	388.98	1.35	4.83	61.31	377.43	-415.68	560.63	554.45	6.18	90.753	
500.00	499.84	488.84	488.84	1.70	6.68	61.82	377.43	-415.68	558.13	549.76	8.37	66.671	
600.00	599.45	588.45	588.45	2.05	8.98	62.69	377.43	-415.68	554.06	543.03	11.03	50.242	
700.00	698.70	688.02	688.00	2.41	11.28	64.03	379.00	-415.68	549.66	535.97	13.69	40.153	
800.00	797.47	788.99	788.95	2.77	13.62	65.63	378.64	-415.68	542.68	526.29	16.39	33.114	
900.00	895.62	889.42	889.37	3.14	15.94	67.60	377.74	-415.68	534.32	515.24	19.08	28.003	
1,000.00	993.06	982.11	982.06	3.52	17.95	69.85	377.43	-415.68	525.70	504.23	21.47	24.488	
1,100.00	1,089.87	1,078.93	1,078.87	3.91	20.00	72.43	377.43	-415.68	517.38	493.48	23.90	21.647	
1,200.00	1,186.65	1,175.87	1,175.81	4.30	22.05	75.11	378.52	-415.68	511.02	484.67	26.34	19.398	
1,300.00	1,283.44	1,274.14	1,274.07	4.69	24.13	77.82	378.32	-415.68	504.76	475.95	28.82	17.516	
1,400.00	1,380.22	1,372.48	1,372.40	5.09	26.21	80.57	377.78	-415.68	499.40	468.11	31.30	15.957	
1,500.00	1,477.00	1,466.08	1,466.00	5.49	28.19	83.24	377.43	-415.68	495.40	461.72	33.68	14.709	
1,600.00	1,573.78	1,562.86	1,562.78	5.89	30.25	86.05	377.43	-415.68	492.98	456.84	36.14	13.642	
1,700.00	1,670.56	1,659.64	1,659.56	6.29	32.30	88.88	377.43	-415.68	491.83	453.24	38.59	12.745	
1,708.56	1,678.85	1,667.93	1,667.85	6.33	32.48	89.13	377.43	-415.68	491.79	452.99	38.80	12.675	CC
1,800.00	1,767.35	1,757.91	1,757.81	6.69	34.39	91.80	378.39	-415.68	492.88	451.81	41.08	12.000	
1,900.00	1,864.13	1,856.37	1,856.27	7.10	36.48	94.65	377.92	-415.68	493.87	450.30	43.56	11.337	
2,000.00	1,960.91	1,950.02	1,949.91	7.50	38.47	97.36	377.43	-415.68	496.08	450.14	45.94	10.798	ES
2,100.00	2,057.69	2,046.80	2,046.69	7.90	40.52	100.13	377.43	-415.68	500.03	451.64	48.39	10.333	
2,200.00	2,154.47	2,143.58	2,143.47	8.31	42.58	102.85	377.43	-415.68	505.21	454.37	50.83	9.939	
2,300.00	2,251.26	2,241.69	2,241.57	8.71	44.66	105.56	378.42	-415.68	512.56	459.26	53.30	9.617	
2,400.00	2,348.04	2,340.31	2,340.19	9.12	46.76	108.20	378.00	-415.68	519.65	463.87	55.77	9.317	
2,500.00	2,444.82	2,433.95	2,433.82	9.52	48.77	110.64	377.43	-415.68	527.67	469.52	58.15	9.074	
2,600.00	2,541.62	2,530.75	2,530.62	9.93	50.91	118.61	377.43	-415.68	538.07	477.41	60.66	8.870	
2,699.99	2,638.44	2,627.57	2,627.44	10.33	53.06	128.62	377.43	-415.68	552.23	489.05	63.17	8.741	
2,800.00	2,735.22	2,725.11	2,724.96	10.74	55.23	131.19	378.57	-415.68	569.91	504.21	65.69	8.675	
2,900.00	2,832.01	2,823.78	2,823.63	11.14	57.42	133.05	378.28	-415.68	586.80	518.56	68.24	8.599	
3,000.00	2,928.79	2,922.56	2,922.40	11.54	59.61	134.81	377.67	-415.68	603.94	533.16	70.78	8.533	
3,100.00	3,025.57	3,014.73	3,014.57	11.95	61.71	136.35	377.43	-415.68	621.94	548.71	73.23	8.493	
3,200.00	3,122.35	3,111.51	3,111.35	12.35	63.95	137.88	377.43	-415.68	640.65	564.84	75.81	8.451	
3,300.00	3,219.14	3,208.50	3,208.33	12.76	66.19	139.30	378.79	-415.68	661.09	582.70	78.40	8.433	
3,400.00	3,315.92	3,308.14	3,307.96	13.16	68.50	140.71	378.54	-415.68	680.39	599.34	81.05	8.395	
3,500.00	3,412.70	3,407.90	3,407.71	13.57	70.80	142.05	377.85	-415.68	699.65	615.95	83.70	8.359	
3,600.00	3,509.48	3,498.68	3,498.48	13.97	72.72	143.21	377.43	-415.68	719.46	633.50	85.96	8.370	
3,700.00	3,606.27	3,595.46	3,595.27	14.38	74.60	144.36	377.43	-415.68	739.99	651.81	88.18	8.392	
3,800.00	3,703.05	3,692.25	3,692.05	14.78	76.48	145.45	377.43	-415.68	760.80	670.40	90.40	8.416	
3,900.00	3,799.83	3,791.19	3,790.98	15.19	78.40	146.47	378.78	-415.68	783.09	690.43	92.66	8.451	
4,000.00	3,896.61	3,891.02	3,890.79	15.60	80.34	147.50	378.27	-415.68	803.94	708.99	94.95	8.467	
4,100.00	3,993.40	3,990.97	3,990.72	16.00	82.28	148.48	377.36	-415.68	824.66	727.43	97.24	8.481	
4,200.00	4,090.18	4,079.42	4,079.18	16.41	83.83	149.29	377.43	-415.68	846.40	747.28	99.12	8.539	
4,300.00	4,186.96	4,176.20	4,175.96	16.82	85.54	150.13	377.43	-415.68	868.30	767.13	101.17	8.582	
4,400.00	4,283.74	4,273.57	4,273.33	17.23	87.26	150.93	377.64	-415.68	890.56	787.32	103.24	8.626	
4,500.00	4,380.53	4,371.15	4,370.91	17.63	88.99	151.70	377.52	-415.68	912.69	807.38	105.31	8.667	
4,600.00	4,477.31	4,466.56	4,466.31	18.04	91.00	153.25	377.43	-415.68	934.99	827.33	107.66	8.684	
4,700.00	4,575.17	4,564.42	4,564.17	18.43	93.34	172.86	377.43	-415.68	954.30	843.96	110.35	8.648	
4,800.00	4,674.18	4,666.17	4,665.92	18.77	95.78	-148.00	377.84	-415.68	968.20	855.07	113.12	8.559	
4,900.00	4,773.25	4,762.50	4,762.25	19.07	98.12	-107.36	377.43	-415.68	975.51	859.73	115.78	8.426	
5,000.00	4,871.30	4,860.55	4,860.30	19.33	100.74	-88.37	377.43	-415.68	977.51	858.80	118.71	8.234	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design:OCHO_TESORO OFFSETS - BURCH KEELY UNIT #225 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 432-INC-ONLY		Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned:				Offset Well Error:	0.00 usft
Reference	Vertical	Reference	Vertical	Reference	Offset	Highside			Distance				Warning	
Measured Depth (usft)	Depth (usft)	Measured Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,100.00	4,967.25	4,962.91	4,962.63	19.57	103.48	-80.88	378.51	-415.68	975.32	853.55	121.77	8.010		
5,200.00	5,060.05	5,066.48	5,066.16	19.79	106.24	-78.43	377.13	-415.68	966.61	841.76	124.85	7.742		
5,300.00	5,148.68	5,065.00	5,064.69	20.00	106.18	-75.70	377.43	-415.68	958.54	834.00	124.54	7.697 SF		
5,400.00	5,232.18	5,065.00	5,064.69	20.19	106.18	-73.77	377.43	-415.68	955.61	832.22	123.38	7.745		
5,404.45	5,235.76	5,065.00	5,064.69	20.20	106.18	-73.70	377.43	-415.68	955.60	832.29	123.31	7.749		
5,500.00	5,309.62	5,065.00	5,064.69	20.38	106.18	-72.18	377.43	-415.68	958.15	836.62	121.52	7.884		
5,600.00	5,380.17	5,065.00	5,064.69	20.57	106.18	-70.71	377.43	-415.68	966.10	846.85	119.24	8.102		
5,700.00	5,443.04	5,065.00	5,064.69	20.77	106.18	-69.23	377.43	-415.68	979.23	862.38	116.85	8.380		
5,799.99	5,497.55	5,065.00	5,064.69	20.98	106.18	-67.70	377.43	-415.68	997.21	882.55	114.66	8.697		
5,900.00	5,547.55	5,065.00	5,064.69	21.24	106.18	-67.68	377.43	-415.68	1,022.10	909.38	112.72	9.068		
5,999.99	5,597.55	5,065.00	5,064.69	21.54	106.18	-67.68	377.43	-415.68	1,055.90	944.96	110.94	9.518		
6,100.00	5,639.98	5,065.00	5,064.69	21.86	106.18	-63.89	377.43	-415.68	1,094.76	984.97	109.79	9.971		
6,200.00	5,666.06	5,065.00	5,064.69	22.21	106.18	-60.09	377.43	-415.68	1,134.28	1,024.52	109.75	10.335		
6,299.99	5,675.00	5,065.00	5,064.69	22.54	106.18	-56.49	377.43	-415.68	1,173.25	1,062.50	110.75	10.594		
6,400.00	5,675.00	5,065.00	5,064.69	22.90	106.18	-56.44	377.43	-415.68	1,214.99	1,102.75	112.23	10.826		
6,500.00	5,675.00	5,065.00	5,064.69	23.32	106.18	-56.44	377.43	-415.68	1,263.27	1,149.56	113.71	11.109		
6,600.00	5,675.00	5,065.00	5,064.69	23.78	106.18	-56.44	377.43	-415.68	1,317.40	1,202.26	115.14	11.442		
6,700.00	5,675.00	5,065.00	5,064.69	24.29	106.18	-56.44	377.43	-415.68	1,376.66	1,260.19	116.47	11.820		
6,800.00	5,675.00	5,065.00	5,064.69	24.84	106.18	-56.44	377.43	-415.68	1,440.44	1,322.74	117.70	12.239		
6,900.00	5,675.00	5,065.00	5,064.69	25.43	106.18	-56.44	377.43	-415.68	1,508.16	1,389.35	118.80	12.694		
7,000.00	5,675.00	5,065.00	5,064.69	26.06	106.18	-56.44	377.43	-415.68	1,579.31	1,459.50	119.80	13.183		
7,100.00	5,675.00	5,065.00	5,064.69	26.72	106.18	-56.44	377.43	-415.68	1,653.44	1,532.75	120.69	13.700		
7,200.00	5,675.00	5,065.00	5,064.69	27.41	106.18	-56.44	377.43	-415.68	1,730.19	1,608.70	121.48	14.242		
7,300.00	5,675.00	5,065.00	5,064.69	28.13	106.18	-56.44	377.43	-415.68	1,809.20	1,687.02	122.18	14.807		
7,400.00	5,675.00	5,065.00	5,064.69	28.88	106.18	-56.44	377.43	-415.68	1,890.21	1,767.40	122.81	15.391		
7,500.00	5,675.00	5,065.00	5,064.69	29.66	106.18	-56.44	377.43	-415.68	1,972.96	1,849.59	123.36	15.993		
7,600.00	5,675.00	5,065.00	5,064.69	30.45	106.18	-56.44	377.43	-415.68	2,057.24	1,933.38	123.86	16.610		
7,700.00	5,675.00	5,065.00	5,064.69	31.27	106.18	-56.44	377.43	-415.68	2,142.87	2,018.57	124.30	17.240		
7,800.00	5,675.00	5,065.00	5,064.69	32.10	106.18	-56.44	377.43	-415.68	2,229.70	2,105.01	124.69	17.882		
7,900.00	5,675.00	5,065.00	5,064.69	32.95	106.18	-56.44	377.43	-415.68	2,317.59	2,192.55	125.04	18.535		
8,000.00	5,675.00	5,065.00	5,064.69	33.82	106.18	-56.44	377.43	-415.68	2,406.43	2,281.07	125.36	19.196		
8,100.00	5,675.00	5,065.00	5,064.69	34.70	106.18	-56.44	377.43	-415.68	2,496.11	2,370.47	125.64	19.866		
8,200.00	5,675.00	5,065.00	5,064.69	35.60	106.18	-56.44	377.43	-415.68	2,586.55	2,460.65	125.90	20.544		
8,300.00	5,675.00	5,065.00	5,064.69	36.51	106.18	-56.44	377.43	-415.68	2,677.67	2,551.53	126.14	21.228		
8,400.00	5,675.00	5,065.00	5,064.69	37.43	106.18	-56.44	377.43	-415.68	2,769.40	2,643.05	126.35	21.918		
8,500.00	5,675.00	5,065.00	5,064.69	38.37	106.18	-56.44	377.43	-415.68	2,861.69	2,735.14	126.55	22.613		
8,600.00	5,675.00	5,065.00	5,064.69	39.31	106.18	-56.44	377.43	-415.68	2,954.47	2,827.74	126.73	23.313		
8,700.00	5,675.00	5,065.00	5,064.69	40.26	106.18	-56.44	377.43	-415.68	3,047.72	2,920.82	126.90	24.017		
8,800.00	5,675.00	5,065.00	5,064.69	41.22	106.18	-56.44	377.43	-415.68	3,141.38	3,014.33	127.05	24.725		
8,900.00	5,675.00	5,065.00	5,064.69	42.19	106.18	-56.44	377.43	-415.68	3,235.42	3,108.22	127.19	25.437		
9,000.00	5,675.00	5,065.00	5,064.69	43.17	106.18	-56.44	377.43	-415.68	3,329.80	3,202.48	127.33	26.151		
9,100.00	5,675.00	5,065.00	5,064.69	44.15	106.18	-56.44	377.43	-415.68	3,424.51	3,297.06	127.45	26.869		
9,200.00	5,675.00	5,065.00	5,064.69	45.14	106.18	-56.44	377.43	-415.68	3,519.51	3,391.94	127.57	27.589		
9,300.00	5,675.00	5,065.00	5,064.69	46.14	106.18	-56.44	377.43	-415.68	3,614.77	3,487.09	127.68	28.311		
9,400.00	5,675.00	5,065.00	5,064.69	47.15	106.18	-56.44	377.43	-415.68	3,710.29	3,582.51	127.79	29.035		
9,500.00	5,675.00	5,065.00	5,064.69	48.15	106.18	-56.44	377.43	-415.68	3,806.04	3,678.15	127.89	29.761		
9,600.00	5,675.00	5,065.00	5,064.69	49.17	106.18	-56.44	377.43	-415.68	3,902.00	3,774.02	127.98	30.489		
9,700.00	5,675.00	5,065.00	5,064.69	50.19	106.18	-56.44	377.43	-415.68	3,998.16	3,870.09	128.07	31.218		
9,800.00	5,675.00	5,065.00	5,064.69	51.21	106.18	-56.44	377.43	-415.68	4,094.50	3,966.34	128.16	31.948		
9,900.00	5,675.00	5,065.00	5,064.69	52.24	106.18	-56.44	377.43	-415.68	4,191.02	4,062.77	128.24	32.680		
10,000.00	5,675.00	5,065.00	5,064.69	53.27	106.18	-56.44	377.43	-415.68	4,287.69	4,159.36	128.32	33.413		
10,100.00	5,675.00	5,065.00	5,064.69	54.31	106.18	-56.44	377.43	-415.68	4,384.51	4,256.11	128.40	34.146		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design:OCHO_TESORO OFFSETS - BURCH KEELY UNIT #225 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 432-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
10,200.00	5,675.00	5,065.00	5,064.69	55.34	106.18	-56.44	377.43	-415.68	4,481.48	4,353.00	128.48	34.881		
10,300.00	5,675.00	5,065.00	5,064.69	56.39	106.18	-56.44	377.43	-415.68	4,578.57	4,450.01	128.55	35.616		
10,400.00	5,675.00	5,065.00	5,064.69	57.43	106.18	-56.44	377.43	-415.68	4,675.78	4,547.16	128.63	36.352		
10,500.00	5,675.00	5,065.00	5,064.69	58.48	106.18	-56.44	377.43	-415.68	4,773.11	4,644.42	128.70	37.088		
10,600.00	5,675.00	5,065.00	5,064.69	59.53	106.18	-56.44	377.43	-415.68	4,870.55	4,741.79	128.77	37.825		
10,700.00	5,675.00	5,065.00	5,064.69	60.59	106.18	-56.44	377.43	-415.68	4,968.09	4,839.26	128.83	38.562		

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #242 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 418-INC-ONLY													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Rule Assigned: Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-156.48	-942.80	-410.39	1,028.37					
100.00	100.00	84.00	84.00	0.29	0.73	-156.48	-942.80	-410.39	1,028.25	1,027.23		1.01	1,014.919	
200.00	200.00	184.00	184.00	0.65	1.59	-156.48	-942.80	-410.39	1,028.25	1,026.01		2.24	459.796	
300.00	300.00	284.00	284.00	1.00	2.46	-156.48	-942.80	-410.39	1,028.25	1,024.79		3.46	297.225	
400.00	399.98	383.98	383.98	1.35	3.32	-47.67	-942.80	-410.39	1,027.07	1,022.40		4.67	219.807	
500.00	499.84	483.84	483.84	1.70	5.03	-47.93	-942.80	-410.39	1,023.55	1,016.82		6.73	152.079	
600.00	599.45	583.45	583.45	2.05	7.18	-48.39	-942.80	-410.39	1,017.73	1,008.50		9.23	110.299	
700.00	698.70	682.54	682.54	2.41	9.31	-49.02	-942.53	-410.39	1,009.40	997.69		11.72	86.154	
800.00	797.47	780.50	780.50	2.77	11.42	-49.84	-942.59	-410.39	999.21	985.03		14.18	70.445	
900.00	895.62	877.87	877.87	3.14	13.51	-50.86	-942.74	-410.39	987.04	970.40		16.64	59.305	
1,000.00	993.06	977.06	977.06	3.52	16.14	-52.12	-942.80	-410.39	972.87	953.23		19.64	49.536	
1,100.00	1,089.87	1,073.87	1,073.87	3.91	18.92	-53.35	-942.80	-410.39	957.42	934.62		22.80	41.998	
1,200.00	1,186.65	1,169.82	1,169.78	4.30	21.69	-54.50	-940.65	-410.39	940.24	914.31		25.93	36.260	
1,300.00	1,283.44	1,260.96	1,260.90	4.69	24.31	-55.67	-941.03	-410.39	925.92	896.99		28.93	32.004	
1,400.00	1,380.22	1,352.23	1,352.14	5.09	26.93	-56.89	-941.99	-410.39	912.67	880.73		31.94	28.575	
1,500.00	1,477.00	1,461.10	1,461.00	5.49	29.74	-58.38	-942.80	-410.39	899.61	864.48		35.14	25.603	
1,600.00	1,573.78	1,557.88	1,557.78	5.89	31.98	-59.73	-942.80	-410.39	886.36	848.59		37.77	23.469	
1,700.00	1,670.56	1,654.54	1,654.40	6.29	34.22	-61.09	-940.63	-410.39	871.50	831.10		40.40	21.573	
1,800.00	1,767.35	1,745.94	1,745.79	6.69	36.34	-62.45	-940.94	-410.39	859.63	816.72		42.91	20.032	
1,900.00	1,864.13	1,837.47	1,837.29	7.10	38.46	-63.84	-941.83	-410.39	848.95	803.52		45.43	18.687	
2,000.00	1,960.91	1,945.11	1,944.91	7.50	40.73	-65.52	-942.80	-410.39	838.82	790.72		48.11	17.437	
2,100.00	2,057.69	2,041.90	2,041.69	7.90	42.49	-67.06	-942.80	-410.39	828.42	778.15		50.27	16.478	
2,200.00	2,154.47	2,138.68	2,138.47	8.31	44.25	-68.64	-942.80	-410.39	818.67	766.22		52.44	15.611	
2,300.00	2,251.26	2,234.28	2,234.07	8.71	45.99	-70.23	-942.32	-410.39	809.09	754.50		54.59	14.820	
2,400.00	2,348.04	2,329.74	2,329.53	9.12	47.73	-71.85	-942.54	-410.39	800.91	744.17		56.74	14.114	
2,500.00	2,444.82	2,429.03	2,428.82	9.52	49.57	-73.57	-942.80	-410.39	793.47	734.48		59.00	13.449	
2,600.00	2,541.62	2,525.83	2,525.62	9.93	51.45	-69.73	-942.80	-410.39	785.69	724.40		61.29	12.819	
2,699.99	2,638.44	2,622.64	2,622.44	10.33	53.33	-63.57	-942.80	-410.39	775.50	711.92		63.58	12.198	
2,800.00	2,735.22	2,718.12	2,717.91	10.74	55.18	-64.55	-942.03	-410.39	763.33	697.49		65.84	11.594	
2,900.00	2,832.01	2,813.10	2,812.88	11.14	57.02	-66.20	-942.32	-410.39	752.86	684.77		68.09	11.057	
3,000.00	2,928.79	2,913.01	2,912.79	11.54	58.97	-67.98	-942.80	-410.39	743.27	672.82		70.45	10.550	
3,100.00	3,025.57	3,009.79	3,009.57	11.95	61.03	-69.75	-942.80	-410.39	733.94	661.01		72.93	10.064	
3,200.00	3,122.35	3,106.58	3,106.35	12.35	63.09	-71.56	-942.80	-410.39	725.35	649.96		75.40	9.620	
3,300.00	3,219.14	3,202.47	3,202.24	12.76	65.13	-73.41	-942.01	-410.39	716.80	638.95		77.85	9.207	
3,400.00	3,315.92	3,297.60	3,297.37	13.16	67.16	-75.26	-942.26	-410.39	710.04	629.75		80.29	8.844	
3,500.00	3,412.70	3,392.80	3,392.57	13.57	69.18	-77.13	-942.73	-410.39	704.34	621.61		82.73	8.514	
3,600.00	3,509.48	3,493.72	3,493.48	13.97	71.58	-79.16	-942.80	-410.39	699.08	613.54		85.54	8.173	
3,700.00	3,606.27	3,590.50	3,590.27	14.38	73.90	-81.14	-942.80	-410.39	694.63	606.36		88.28	7.869	
3,800.00	3,703.05	3,686.49	3,686.24	14.78	76.21	-83.17	-941.44	-410.39	689.85	598.86		90.99	7.581	
3,900.00	3,799.83	3,780.86	3,780.60	15.19	78.48	-85.12	-941.75	-410.39	687.51	593.84		93.67	7.340	
4,000.00	3,896.61	3,875.35	3,875.08	15.60	80.75	-87.07	-942.45	-410.39	686.40	590.06		96.34	7.125	
4,100.00	3,993.40	3,977.67	3,977.40	16.00	83.27	-89.21	-942.80	-410.39	685.86	586.59		99.27	6.909	
4,139.00	4,031.14	4,015.42	4,015.14	16.16	84.22	-90.00	-942.80	-410.39	685.79	585.42		100.37	6.832	
4,200.00	4,090.18	4,074.46	4,074.18	16.41	85.70	-91.24	-942.80	-410.39	685.96	583.87		102.09	6.719	
4,300.00	4,186.96	4,171.24	4,170.96	16.82	88.12	-93.27	-942.80	-410.39	686.99	582.08		104.91	6.548	
4,400.00	4,283.74	4,265.70	4,265.39	17.23	90.48	-95.32	-941.25	-410.39	687.73	580.07		107.66	6.388	
4,500.00	4,380.53	4,360.17	4,359.85	17.63	92.85	-97.26	-941.88	-410.39	691.11	580.70		110.41	6.260	
4,600.00	4,477.31	4,461.65	4,461.31	18.04	95.42	-98.55	-942.80	-410.39	695.52	582.15		113.37	6.135	
4,700.00	4,575.17	4,559.51	4,559.17	18.43	98.07	-82.00	-942.80	-410.39	696.29	579.91		116.38	5.983	
4,800.00	4,674.18	4,658.52	4,658.18	18.77	100.74	-44.14	-942.80	-410.39	690.66	571.27		119.39	5.785	
4,900.00	4,773.25	4,757.59	4,757.25	19.07	103.42	-3.11	-942.80	-410.39	678.27	555.90		122.37	5.543	
5,000.00	4,871.30	4,820.00	4,819.62	19.33	105.11	17.83	-942.80	-410.39	660.05	535.94		124.11	5.318	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #242 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 418-INC-ONLY													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning	
							+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,100.00	4,967.25	4,820.00	4,819.62	19.57	105.11	27.81	-942.80	-410.39	646.97	525.09	121.88	5.308 ES, SF		
5,200.00	5,060.05	4,820.00	4,819.62	19.79	105.11	33.12	-942.80	-410.39	642.53	525.58	116.95	5.494 CC		
5,204.45	5,064.09	4,820.00	4,819.62	19.80	105.11	33.29	-942.80	-410.39	642.54	525.86	116.67	5.507		
5,300.00	5,148.68	4,820.00	4,819.62	20.00	105.11	36.05	-942.80	-410.39	646.95	537.27	109.68	5.899		
5,400.00	5,232.18	4,820.00	4,819.62	20.19	105.11	37.53	-942.80	-410.39	660.01	559.20	100.80	6.548		
5,500.00	5,309.62	4,820.00	4,819.62	20.38	105.11	38.01	-942.80	-410.39	681.07	589.72	91.35	7.456		
5,600.00	5,380.17	4,820.00	4,819.62	20.57	105.11	37.75	-942.80	-410.39	709.20	626.75	82.45	8.601		
5,700.00	5,443.04	4,820.00	4,819.62	20.77	105.11	36.95	-942.80	-410.39	743.32	668.13	75.19	9.887		
5,799.99	5,497.55	4,820.00	4,819.62	20.98	105.11	35.74	-942.80	-410.39	782.28	711.88	70.40	11.111		
5,900.00	5,547.55	4,820.00	4,819.62	21.24	105.11	35.72	-942.80	-410.39	828.26	760.13	68.14	12.156		
5,999.99	5,597.55	4,820.00	4,819.62	21.54	105.11	35.72	-942.80	-410.39	883.21	815.45	67.75	13.035		
6,100.00	5,639.98	4,820.00	4,819.62	21.86	105.11	31.93	-942.80	-410.39	940.09	870.77	69.31	13.563		
6,200.00	5,666.06	4,820.00	4,819.62	22.21	105.11	28.86	-942.80	-410.39	992.03	919.14	72.89	13.610		
6,299.99	5,675.00	4,820.00	4,819.62	22.54	105.11	26.43	-942.80	-410.39	1,038.32	960.44	77.88	13.332		
6,400.00	5,675.00	4,820.00	4,819.62	22.90	105.11	26.40	-942.80	-410.39	1,085.15	1,001.85	83.30	13.027		
6,500.00	5,675.00	4,820.00	4,819.62	23.32	105.11	26.40	-942.80	-410.39	1,138.84	1,050.49	88.35	12.890		
6,600.00	5,675.00	4,820.00	4,819.62	23.78	105.11	26.40	-942.80	-410.39	1,198.49	1,105.59	92.90	12.901		
6,700.00	5,675.00	4,820.00	4,819.62	24.29	105.11	26.40	-942.80	-410.39	1,263.25	1,166.33	96.92	13.033		
6,800.00	5,675.00	4,820.00	4,819.62	24.84	105.11	26.40	-942.80	-410.39	1,332.37	1,231.94	100.43	13.266		
6,900.00	5,675.00	4,820.00	4,819.62	25.43	105.11	26.40	-942.80	-410.39	1,405.22	1,301.74	103.48	13.580		
7,000.00	5,675.00	4,820.00	4,819.62	26.06	105.11	26.40	-942.80	-410.39	1,481.23	1,375.13	106.11	13.960		
7,100.00	5,675.00	4,820.00	4,819.62	26.72	105.11	26.40	-942.80	-410.39	1,559.96	1,451.58	108.38	14.394		
7,200.00	5,675.00	4,820.00	4,819.62	27.41	105.11	26.40	-942.80	-410.39	1,641.00	1,530.66	110.34	14.872		
7,300.00	5,675.00	4,820.00	4,819.62	28.13	105.11	26.40	-942.80	-410.39	1,724.04	1,612.00	112.04	15.388		
7,400.00	5,675.00	4,820.00	4,819.62	28.88	105.11	26.40	-942.80	-410.39	1,808.79	1,695.27	113.52	15.934		
7,500.00	5,675.00	4,820.00	4,819.62	29.66	105.11	26.40	-942.80	-410.39	1,895.03	1,780.23	114.81	16.506		
7,600.00	5,675.00	4,820.00	4,819.62	30.45	105.11	26.40	-942.80	-410.39	1,982.57	1,866.63	115.94	17.101		
7,700.00	5,675.00	4,820.00	4,819.62	31.27	105.11	26.40	-942.80	-410.39	2,071.23	1,954.30	116.93	17.714		
7,800.00	5,675.00	4,820.00	4,819.62	32.10	105.11	26.40	-942.80	-410.39	2,160.88	2,043.08	117.80	18.343		
7,900.00	5,675.00	4,820.00	4,819.62	32.95	105.11	26.40	-942.80	-410.39	2,251.41	2,132.83	118.58	18.987		
8,000.00	5,675.00	4,820.00	4,819.62	33.82	105.11	26.40	-942.80	-410.39	2,342.70	2,223.43	119.27	19.642		
8,100.00	5,675.00	4,820.00	4,819.62	34.70	105.11	26.40	-942.80	-410.39	2,434.68	2,314.80	119.88	20.309		
8,200.00	5,675.00	4,820.00	4,819.62	35.60	105.11	26.40	-942.80	-410.39	2,527.27	2,406.83	120.44	20.984		
8,300.00	5,675.00	4,820.00	4,819.62	36.51	105.11	26.40	-942.80	-410.39	2,620.40	2,499.47	120.94	21.668		
8,400.00	5,675.00	4,820.00	4,819.62	37.43	105.11	26.40	-942.80	-410.39	2,714.02	2,592.64	121.39	22.359		
8,500.00	5,675.00	4,820.00	4,819.62	38.37	105.11	26.40	-942.80	-410.39	2,808.09	2,686.29	121.79	23.056		
8,600.00	5,675.00	4,820.00	4,819.62	39.31	105.11	26.40	-942.80	-410.39	2,902.54	2,780.38	122.17	23.759		
8,700.00	5,675.00	4,820.00	4,819.62	40.26	105.11	26.40	-942.80	-410.39	2,997.36	2,874.86	122.51	24.467		
8,800.00	5,675.00	4,820.00	4,819.62	41.22	105.11	26.40	-942.80	-410.39	3,092.51	2,969.69	122.82	25.179		
8,900.00	5,675.00	4,820.00	4,819.62	42.19	105.11	26.40	-942.80	-410.39	3,187.95	3,064.84	123.11	25.896		
9,000.00	5,675.00	4,820.00	4,819.62	43.17	105.11	26.40	-942.80	-410.39	3,283.66	3,160.29	123.37	26.616		
9,100.00	5,675.00	4,820.00	4,819.62	44.15	105.11	26.40	-942.80	-410.39	3,379.62	3,256.01	123.62	27.339		
9,200.00	5,675.00	4,820.00	4,819.62	45.14	105.11	26.40	-942.80	-410.39	3,475.81	3,351.97	123.85	28.065		
9,300.00	5,675.00	4,820.00	4,819.62	46.14	105.11	26.40	-942.80	-410.39	3,572.21	3,448.15	124.06	28.794		
9,400.00	5,675.00	4,820.00	4,819.62	47.15	105.11	26.40	-942.80	-410.39	3,668.80	3,544.54	124.26	29.525		
9,500.00	5,675.00	4,820.00	4,819.62	48.15	105.11	26.40	-942.80	-410.39	3,765.57	3,641.12	124.45	30.258		
9,600.00	5,675.00	4,820.00	4,819.62	49.17	105.11	26.40	-942.80	-410.39	3,862.51	3,737.88	124.63	30.993		
9,700.00	5,675.00	4,820.00	4,819.62	50.19	105.11	26.40	-942.80	-410.39	3,959.59	3,834.80	124.79	31.730		
9,800.00	5,675.00	4,820.00	4,819.62	51.21	105.11	26.40	-942.80	-410.39	4,056.82	3,931.87	124.95	32.468		
9,900.00	5,675.00	4,820.00	4,819.62	52.24	105.11	26.40	-942.80	-410.39	4,154.18	4,029.08	125.10	33.207		
10,000.00	5,675.00	4,820.00	4,819.62	53.27	105.11	26.40	-942.80	-410.39	4,251.66	4,126.42	125.24	33.947		
10,100.00	5,675.00	4,820.00	4,819.62	54.31	105.11	26.40	-942.80	-410.39	4,349.26	4,223.88	125.38	34.689		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design:OCHO_TESORO OFFSETS - BURCH KEELY UNIT #242 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 418-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:		Distance			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
10,200.00	5,675.00	4,820.00	4,819.62	55.34	105.11	26.40	-942.80	-410.39	4,446.96	4,321.45	125.51	35.431		
10,300.00	5,675.00	4,820.00	4,819.62	56.39	105.11	26.40	-942.80	-410.39	4,544.77	4,419.13	125.63	36.174		
10,400.00	5,675.00	4,820.00	4,819.62	57.43	105.11	26.40	-942.80	-410.39	4,642.66	4,516.91	125.76	36.918		
10,500.00	5,675.00	4,820.00	4,819.62	58.48	105.11	26.40	-942.80	-410.39	4,740.65	4,614.78	125.87	37.663		
10,600.00	5,675.00	4,820.00	4,819.62	59.53	105.11	26.40	-942.80	-410.39	4,838.71	4,712.73	125.98	38.408		
10,700.00	5,675.00	4,820.00	4,819.62	60.59	105.11	26.40	-942.80	-410.39	4,936.86	4,810.77	126.09	39.153		

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #270 - Wellbore #1 - Wellbore #1														Offset Site Error:	0.00 usft
Survey Program: 400-INC-ONLY														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning		
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
0.00	0.00	0.00	0.00	0.00	0.00	-172.09	-2,896.02	-402.57	2,923.98						
100.00	100.00	74.00	74.00	0.29	0.76	-172.09	-2,896.02	-402.57	2,923.87	2,922.82	1.05	2,786.410			
200.00	200.00	174.00	174.00	0.65	1.79	-172.09	-2,896.02	-402.57	2,923.87	2,921.43	2.44	1,199.151			
300.00	300.00	274.00	274.00	1.00	2.82	-172.09	-2,896.02	-402.57	2,923.87	2,920.04	3.83	763.964			
400.00	399.98	373.98	373.98	1.35	3.85	-63.23	-2,896.02	-402.57	2,923.08	2,917.87	5.21	561.495			
500.00	499.84	473.84	473.84	1.70	5.83	-63.36	-2,896.02	-402.57	2,920.73	2,913.20	7.53	388.026			
600.00	599.45	573.45	573.45	2.05	8.13	-63.59	-2,896.02	-402.57	2,916.82	2,906.64	10.18	286.446			
700.00	698.70	671.94	671.93	2.41	10.41	-63.89	-2,894.87	-402.57	2,910.26	2,897.44	12.82	227.054			
800.00	797.47	762.14	762.12	2.77	12.49	-64.27	-2,895.03	-402.57	2,903.52	2,888.26	15.26	190.208			
900.00	895.62	851.81	851.79	3.14	14.57	-64.71	-2,895.45	-402.57	2,895.66	2,877.95	17.71	163.545			
1,000.00	993.06	967.08	967.06	3.52	17.27	-65.36	-2,896.02	-402.57	2,886.48	2,865.70	20.78	138.879			
1,100.00	1,089.87	1,063.90	1,063.87	3.91	19.61	-65.85	-2,896.02	-402.57	2,875.87	2,852.37	23.50	122.375			
1,200.00	1,186.65	1,160.68	1,160.65	4.30	21.95	-66.30	-2,896.02	-402.57	2,865.38	2,839.17	26.22	109.285			
1,300.00	1,283.44	1,249.39	1,249.34	4.69	24.09	-66.71	-2,894.37	-402.57	2,853.45	2,824.71	28.75	99.261			
1,400.00	1,380.22	1,334.30	1,334.24	5.09	26.14	-67.11	-2,894.79	-402.57	2,843.81	2,812.63	31.19	91.191			
1,500.00	1,477.00	1,419.29	1,419.21	5.49	28.19	-67.51	-2,895.57	-402.57	2,834.77	2,801.14	33.63	84.299			
1,600.00	1,573.78	1,547.87	1,547.78	5.89	31.30	-68.12	-2,896.02	-402.57	2,825.29	2,788.16	37.13	76.099			
1,700.00	1,670.56	1,644.65	1,644.56	6.29	33.64	-68.58	-2,896.02	-402.57	2,815.74	2,775.88	39.86	70.641			
1,800.00	1,767.35	1,735.22	1,735.12	6.69	35.83	-69.01	-2,894.81	-402.57	2,805.18	2,762.73	42.44	66.090			
1,900.00	1,864.13	1,820.81	1,820.70	7.10	37.90	-69.43	-2,895.17	-402.57	2,796.43	2,751.52	44.91	62.266			
2,000.00	1,960.91	1,935.03	1,934.91	7.50	40.68	-69.98	-2,896.02	-402.57	2,788.26	2,740.17	48.08	57.987			
2,100.00	2,057.69	2,027.78	2,027.64	7.90	43.01	-70.44	-2,895.39	-402.57	2,778.87	2,728.05	50.82	54.679			
2,200.00	2,154.47	2,128.62	2,128.47	8.31	45.56	-70.93	-2,896.02	-402.57	2,770.93	2,717.16	53.76	51.539			
2,300.00	2,251.26	2,225.40	2,225.26	8.71	48.00	-71.41	-2,896.02	-402.57	2,762.56	2,705.96	56.61	48.804			
2,400.00	2,348.04	2,310.92	2,310.76	9.12	50.15	-71.84	-2,895.13	-402.57	2,753.54	2,694.38	59.16	46.540			
2,500.00	2,444.82	2,419.00	2,418.82	9.52	52.88	-72.38	-2,896.02	-402.57	2,746.45	2,684.16	62.29	44.090			
2,600.00	2,541.62	2,515.80	2,515.62	9.93	55.32	-67.32	-2,896.02	-402.57	2,737.90	2,672.77	65.14	42.033			
2,699.99	2,638.44	2,612.62	2,612.44	10.33	57.76	-59.96	-2,896.02	-402.57	2,726.51	2,658.53	67.98	40.108			
2,800.00	2,735.22	2,709.40	2,709.22	10.74	60.21	-59.77	-2,896.02	-402.57	2,713.45	2,642.64	70.82	38.316			
2,900.00	2,832.01	2,796.24	2,796.02	11.14	62.40	-60.17	-2,894.23	-402.57	2,698.79	2,625.38	73.40	36.766			
3,000.00	2,928.79	2,882.90	2,882.68	11.54	64.59	-60.58	-2,894.71	-402.57	2,686.61	2,610.62	75.99	35.356			
3,100.00	3,025.57	2,969.67	2,969.43	11.95	66.77	-60.99	-2,895.53	-402.57	2,674.97	2,596.40	78.57	34.044			
3,200.00	3,122.35	3,096.60	3,096.35	12.35	69.89	-61.59	-2,896.02	-402.57	2,662.93	2,580.84	82.08	32.441			
3,300.00	3,219.14	3,193.38	3,193.14	12.76	72.23	-62.06	-2,896.02	-402.57	2,650.74	2,565.92	84.82	31.250			
3,400.00	3,315.92	3,278.13	3,277.85	13.16	74.28	-62.47	-2,894.88	-402.57	2,637.63	2,550.36	87.28	30.222			
3,500.00	3,412.70	3,360.77	3,360.49	13.57	76.28	-62.87	-2,895.49	-402.57	2,626.53	2,536.85	89.67	29.290			
3,600.00	3,509.48	3,483.78	3,483.48	13.97	79.17	-63.48	-2,896.02	-402.57	2,615.30	2,522.33	92.97	28.131			
3,700.00	3,606.27	3,580.56	3,580.27	14.38	81.41	-63.96	-2,896.02	-402.57	2,603.87	2,508.25	95.61	27.234			
3,800.00	3,703.05	3,675.29	3,674.98	14.78	83.60	-64.44	-2,894.66	-402.57	2,591.28	2,493.07	98.21	26.386			
3,900.00	3,799.83	3,762.39	3,762.07	15.19	85.62	-64.88	-2,894.90	-402.57	2,580.49	2,479.87	100.63	25.644			
4,000.00	3,896.61	3,849.58	3,849.26	15.60	87.64	-65.33	-2,895.47	-402.57	2,570.27	2,467.22	103.05	24.942			
4,100.00	3,993.40	3,967.73	3,967.40	16.00	90.37	-65.93	-2,896.02	-402.57	2,560.09	2,453.90	106.19	24.109			
4,200.00	4,090.18	4,064.51	4,064.18	16.41	92.61	-66.44	-2,896.02	-402.57	2,549.65	2,440.81	108.83	23.427			
4,300.00	4,186.96	4,160.67	4,160.32	16.82	94.84	-66.94	-2,894.67	-402.57	2,538.08	2,426.61	111.47	22.770			
4,400.00	4,283.74	4,247.92	4,247.57	17.23	96.85	-67.40	-2,894.86	-402.57	2,528.26	2,414.37	113.89	22.198			
4,500.00	4,380.53	4,335.28	4,334.92	17.63	98.88	-67.86	-2,895.38	-402.57	2,519.02	2,402.70	116.32	21.655			
4,600.00	4,477.31	4,451.69	4,451.31	18.04	101.62	-67.69	-2,896.02	-402.57	2,509.97	2,390.49	119.48	21.008			
4,700.00	4,575.17	4,549.55	4,549.17	18.43	103.99	-49.25	-2,896.02	-402.57	2,499.73	2,377.50	122.23	20.451			
4,800.00	4,674.18	4,645.50	4,645.12	18.77	106.31	-10.10	-2,894.85	-402.57	2,486.98	2,362.09	124.89	19.913			
4,900.00	4,773.25	4,733.87	4,733.48	19.07	108.45	31.59	-2,895.16	-402.57	2,474.40	2,347.08	127.32	19.435			
5,000.00	4,871.30	4,845.70	4,845.30	19.33	111.16	52.79	-2,896.02	-402.57	2,461.15	2,330.87	130.28	18.891			
5,100.00	4,967.25	4,870.00	4,869.59	19.57	111.77	63.10	-2,896.02	-402.57	2,447.32	2,316.23	131.09	18.669			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #270 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 400-INC-ONLY													0.00 usft
Rule Assigned:													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.00	5,060.05	4,870.00	4,869.59	19.79	111.77	68.86	-2,896.02	-402.57	2,436.60	2,305.49	131.10	18.586	
5,300.00	5,148.68	4,870.00	4,869.59	20.00	111.77	72.44	-2,896.02	-402.57	2,429.25	2,298.32	130.93	18.553 SF	
5,400.00	5,232.18	4,870.00	4,869.59	20.19	111.77	74.75	-2,896.02	-402.57	2,425.39	2,294.77	130.62	18.568	
5,458.54	5,278.30	4,870.00	4,869.59	20.30	111.77	75.70	-2,896.02	-402.57	2,424.78	2,294.39	130.39	18.596 CC, ES	
5,500.00	5,309.62	4,870.00	4,869.59	20.38	111.77	76.23	-2,896.02	-402.57	2,425.09	2,294.88	130.21	18.624	
5,600.00	5,380.17	4,870.00	4,869.59	20.57	111.77	77.09	-2,896.02	-402.57	2,428.34	2,298.58	129.76	18.714	
5,700.00	5,443.04	4,870.00	4,869.59	20.77	111.77	77.46	-2,896.02	-402.57	2,435.10	2,305.79	129.31	18.832	
5,799.99	5,497.55	4,870.00	4,869.59	20.98	111.77	77.43	-2,896.02	-402.57	2,445.26	2,316.35	128.91	18.969	
5,900.00	5,547.55	4,870.00	4,869.59	21.24	111.77	77.43	-2,896.02	-402.57	2,459.07	2,330.51	128.56	19.127	
5,999.99	5,597.55	4,870.00	4,869.59	21.54	111.77	77.43	-2,896.02	-402.57	2,476.84	2,348.61	128.23	19.316	
6,100.00	5,639.98	4,870.00	4,869.59	21.86	111.77	75.50	-2,896.02	-402.57	2,496.60	2,368.61	127.99	19.506	
6,200.00	5,666.06	4,870.00	4,869.59	22.21	111.77	73.60	-2,896.02	-402.57	2,515.93	2,387.93	128.00	19.656	
6,299.99	5,675.00	4,870.00	4,869.59	22.54	111.77	71.82	-2,896.02	-402.57	2,534.26	2,406.00	128.25	19.760	
6,400.00	5,675.00	4,870.00	4,869.59	22.90	111.77	71.80	-2,896.02	-402.57	2,553.73	2,425.06	128.66	19.848	
6,500.00	5,675.00	4,870.00	4,869.59	23.32	111.77	71.80	-2,896.02	-402.57	2,576.93	2,447.81	129.12	19.957	
6,600.00	5,675.00	4,870.00	4,869.59	23.78	111.77	71.80	-2,896.02	-402.57	2,603.77	2,474.15	129.62	20.088	
6,700.00	5,675.00	4,870.00	4,869.59	24.29	111.77	71.80	-2,896.02	-402.57	2,634.13	2,503.99	130.14	20.240	
6,800.00	5,675.00	4,870.00	4,869.59	24.84	111.77	71.80	-2,896.02	-402.57	2,667.91	2,537.21	130.69	20.414	
6,900.00	5,675.00	4,870.00	4,869.59	25.43	111.77	71.80	-2,896.02	-402.57	2,704.95	2,573.70	131.25	20.609	
7,000.00	5,675.00	4,870.00	4,869.59	26.06	111.77	71.80	-2,896.02	-402.57	2,745.14	2,613.32	131.83	20.824	
7,100.00	5,675.00	4,870.00	4,869.59	26.72	111.77	71.80	-2,896.02	-402.57	2,788.35	2,655.94	132.40	21.060	
7,200.00	5,675.00	4,870.00	4,869.59	27.41	111.77	71.80	-2,896.02	-402.57	2,834.42	2,701.44	132.97	21.316	
7,300.00	5,675.00	4,870.00	4,869.59	28.13	111.77	71.80	-2,896.02	-402.57	2,883.22	2,749.68	133.54	21.591	
7,400.00	5,675.00	4,870.00	4,869.59	28.88	111.77	71.80	-2,896.02	-402.57	2,934.62	2,800.53	134.10	21.884	
7,500.00	5,675.00	4,870.00	4,869.59	29.66	111.77	71.80	-2,896.02	-402.57	2,988.49	2,853.85	134.64	22.196	
7,600.00	5,675.00	4,870.00	4,869.59	30.45	111.77	71.80	-2,896.02	-402.57	3,044.69	2,909.52	135.17	22.525	
7,700.00	5,675.00	4,870.00	4,869.59	31.27	111.77	71.80	-2,896.02	-402.57	3,103.09	2,967.41	135.68	22.870	
7,800.00	5,675.00	4,870.00	4,869.59	32.10	111.77	71.80	-2,896.02	-402.57	3,163.58	3,027.40	136.18	23.231	
7,900.00	5,675.00	4,870.00	4,869.59	32.95	111.77	71.80	-2,896.02	-402.57	3,226.03	3,089.38	136.66	23.607	
8,000.00	5,675.00	4,870.00	4,869.59	33.82	111.77	71.80	-2,896.02	-402.57	3,290.34	3,153.23	137.11	23.997	
8,100.00	5,675.00	4,870.00	4,869.59	34.70	111.77	71.80	-2,896.02	-402.57	3,356.39	3,218.84	137.55	24.401	
8,200.00	5,675.00	4,870.00	4,869.59	35.60	111.77	71.80	-2,896.02	-402.57	3,424.10	3,286.12	137.97	24.817	
8,300.00	5,675.00	4,870.00	4,869.59	36.51	111.77	71.80	-2,896.02	-402.57	3,493.35	3,354.97	138.37	25.246	
8,400.00	5,675.00	4,870.00	4,869.59	37.43	111.77	71.80	-2,896.02	-402.57	3,564.06	3,425.30	138.76	25.685	
8,500.00	5,675.00	4,870.00	4,869.59	38.37	111.77	71.80	-2,896.02	-402.57	3,636.15	3,497.03	139.12	26.136	
8,600.00	5,675.00	4,870.00	4,869.59	39.31	111.77	71.80	-2,896.02	-402.57	3,709.53	3,570.06	139.47	26.597	
8,700.00	5,675.00	4,870.00	4,869.59	40.26	111.77	71.80	-2,896.02	-402.57	3,784.14	3,644.33	139.81	27.067	
8,800.00	5,675.00	4,870.00	4,869.59	41.22	111.77	71.80	-2,896.02	-402.57	3,859.89	3,719.77	140.12	27.546	
8,900.00	5,675.00	4,870.00	4,869.59	42.19	111.77	71.80	-2,896.02	-402.57	3,936.72	3,796.30	140.42	28.034	
9,000.00	5,675.00	4,870.00	4,869.59	43.17	111.77	71.80	-2,896.02	-402.57	4,014.58	3,873.87	140.71	28.530	
9,100.00	5,675.00	4,870.00	4,869.59	44.15	111.77	71.80	-2,896.02	-402.57	4,093.40	3,952.41	140.99	29.034	
9,200.00	5,675.00	4,870.00	4,869.59	45.14	111.77	71.80	-2,896.02	-402.57	4,173.12	4,031.87	141.25	29.545	
9,300.00	5,675.00	4,870.00	4,869.59	46.14	111.77	71.80	-2,896.02	-402.57	4,253.70	4,112.21	141.50	30.062	
9,400.00	5,675.00	4,870.00	4,869.59	47.15	111.77	71.80	-2,896.02	-402.57	4,335.09	4,193.36	141.74	30.586	
9,500.00	5,675.00	4,870.00	4,869.59	48.15	111.77	71.80	-2,896.02	-402.57	4,417.25	4,275.29	141.96	31.116	
9,600.00	5,675.00	4,870.00	4,869.59	49.17	111.77	71.80	-2,896.02	-402.57	4,500.13	4,357.95	142.18	31.651	
9,700.00	5,675.00	4,870.00	4,869.59	50.19	111.77	71.80	-2,896.02	-402.57	4,583.69	4,441.30	142.39	32.192	
9,800.00	5,675.00	4,870.00	4,869.59	51.21	111.77	71.80	-2,896.02	-402.57	4,667.89	4,525.31	142.59	32.737	
9,900.00	5,675.00	4,870.00	4,869.59	52.24	111.77	71.80	-2,896.02	-402.57	4,752.71	4,609.94	142.78	33.288	
10,000.00	5,675.00	4,870.00	4,869.59	53.27	111.77	71.80	-2,896.02	-402.57	4,838.11	4,695.16	142.96	33.843	
10,100.00	5,675.00	4,870.00	4,869.59	54.31	111.77	71.80	-2,896.02	-402.57	4,924.06	4,780.93	143.13	34.402	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #361 - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 327-INC-ONLY		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	-121.95	-257.67	-413.14	487.08				
100.00	100.00	87.00	87.00	0.29	0.74	-121.95	-257.67	-413.14	486.91	485.88	1.03	473.088	
200.00	200.00	187.00	187.00	0.65	1.60	-121.95	-257.67	-413.14	486.91	484.67	2.24	217.267	
300.00	300.00	287.00	287.00	1.00	2.45	-121.95	-257.67	-413.14	486.91	483.45	3.45	141.014	
400.00	399.98	386.98	386.98	1.35	4.09	-13.11	-257.67	-413.14	485.21	479.77	5.44	89.174	
500.00	499.84	486.84	486.84	1.70	6.25	-13.27	-257.67	-413.14	480.11	472.16	7.95	60.388	
600.00	599.45	586.42	586.42	2.05	8.41	-13.53	-257.40	-413.14	471.49	461.03	10.46	45.079	
700.00	698.70	685.45	685.45	2.41	10.55	-13.94	-257.46	-413.14	459.68	446.72	12.96	35.474	
800.00	797.47	784.01	784.01	2.77	12.68	-14.52	-257.60	-413.14	444.58	429.13	15.45	28.780	
900.00	895.62	882.62	882.62	3.14	15.50	-15.27	-257.67	-413.14	426.16	407.53	18.63	22.878	
1,000.00	993.06	980.09	980.06	3.52	18.69	-16.23	-257.67	-413.14	404.47	382.30	22.17	18.245	
1,100.00	1,089.87	1,076.52	1,076.45	3.91	21.90	-17.26	-257.17	-413.14	380.15	354.42	25.73	14.774	
1,200.00	1,186.65	1,173.14	1,173.04	4.30	24.84	-18.47	-257.28	-413.14	356.19	327.17	29.02	12.274	
1,300.00	1,283.44	1,270.55	1,270.44	4.69	27.73	-19.90	-257.67	-413.14	332.58	300.33	32.25	10.311	
1,400.00	1,380.22	1,367.35	1,367.22	5.09	30.56	-21.48	-257.67	-413.14	308.94	273.50	35.45	8.716	
1,500.00	1,477.00	1,461.09	1,460.93	5.49	33.24	-23.25	-257.60	-413.14	285.54	247.05	38.49	7.419	
1,600.00	1,573.78	1,560.94	1,560.78	5.89	36.00	-25.48	-257.67	-413.14	262.52	220.92	41.60	6.311	
1,700.00	1,670.56	1,655.86	1,655.67	6.29	38.61	-27.93	-257.27	-413.14	239.62	195.04	44.58	5.375	
1,800.00	1,767.35	1,754.54	1,754.35	6.69	41.17	-31.14	-257.67	-413.14	217.84	170.33	47.52	4.585	
1,900.00	1,864.13	1,850.55	1,850.34	7.10	43.59	-34.71	-256.83	-413.14	195.86	145.53	50.33	3.892	
2,000.00	1,960.91	1,948.14	1,947.91	7.50	46.02	-39.52	-257.67	-413.14	176.23	123.07	53.16	3.315	
2,100.00	2,057.69	2,044.92	2,044.69	7.90	48.25	-45.27	-257.67	-413.14	157.35	101.53	55.82	2.819	
2,200.00	2,154.47	2,140.76	2,140.51	8.31	50.46	-52.30	-257.30	-413.14	140.11	81.63	58.48	2.396	
2,300.00	2,251.26	2,238.51	2,238.26	8.71	52.65	-61.29	-257.67	-413.14	126.34	65.19	61.16	2.066	
2,400.00	2,348.04	2,334.98	2,334.72	9.12	54.77	-71.89	-257.04	-413.14	115.41	51.63	63.78	1.810	
2,500.00	2,444.82	2,432.09	2,431.82	9.52	56.89	-84.02	-257.67	-413.14	110.60	44.21	66.39	1.666	
2,583.62	2,525.77	2,513.04	2,512.77	9.86	58.59	-90.00	-257.67	-413.14	109.47	41.02	68.45	1.599 CC	
2,600.00	2,541.62	2,528.89	2,528.62	9.93	58.92	-91.17	-257.67	-413.14	109.87	41.02	68.84	1.596	
2,699.99	2,638.44	2,625.25	2,624.97	10.33	60.93	-96.02	-257.35	-413.14	111.23	40.03	71.20	1.562 ES, SF	
2,800.00	2,735.22	2,722.51	2,722.22	10.74	62.97	-107.38	-257.67	-413.14	116.63	43.12	73.51	1.587	
2,900.00	2,832.01	2,819.12	2,818.83	11.14	64.99	-118.18	-257.25	-413.14	126.46	50.70	75.77	1.669	
3,000.00	2,928.79	2,916.08	2,915.79	11.54	66.98	-126.94	-257.67	-413.14	140.53	62.54	77.99	1.802	
3,100.00	3,025.57	3,012.87	3,012.57	11.95	68.81	-134.17	-257.67	-413.14	157.23	77.16	80.07	1.964	
3,200.00	3,122.35	3,109.63	3,109.32	12.35	70.64	-140.24	-256.87	-413.14	175.87	93.70	82.17	2.140	
3,300.00	3,219.14	3,206.43	3,206.13	12.76	72.48	-144.79	-257.23	-413.14	196.11	111.82	84.30	2.326	
3,400.00	3,315.92	3,303.23	3,302.92	13.16	74.28	-148.47	-257.67	-413.14	217.34	130.93	86.41	2.515	
3,500.00	3,412.70	3,400.02	3,399.70	13.57	76.03	-151.60	-257.67	-413.14	239.32	150.84	88.47	2.705	
3,600.00	3,509.48	3,496.84	3,496.52	13.97	77.78	-154.29	-257.29	-413.14	261.92	171.38	90.55	2.893	
3,700.00	3,606.27	3,593.76	3,593.44	14.38	79.53	-156.43	-257.50	-413.14	284.89	192.26	92.63	3.075	
3,800.00	3,703.05	3,690.37	3,690.05	14.78	81.28	-158.26	-257.67	-413.14	308.19	213.47	94.72	3.254	
3,900.00	3,799.83	3,787.15	3,786.83	15.19	83.05	-159.86	-257.67	-413.14	331.79	234.96	96.83	3.427	
4,000.00	3,896.61	3,884.07	3,883.75	15.60	84.81	-161.35	-257.05	-413.14	355.76	256.82	98.94	3.596	
4,100.00	3,993.40	3,981.23	3,980.90	16.00	86.59	-162.52	-257.35	-413.14	379.68	278.62	101.06	3.757	
4,200.00	4,090.18	4,077.51	4,077.18	16.41	88.31	-163.54	-257.67	-413.14	403.72	300.59	103.13	3.915	
4,300.00	4,186.96	4,174.29	4,173.96	16.82	90.00	-164.50	-257.67	-413.14	427.97	322.80	105.17	4.069	
4,400.00	4,283.74	4,271.07	4,270.74	17.23	91.69	-165.35	-257.67	-413.14	452.32	345.11	107.20	4.219	
4,500.00	4,380.53	4,368.08	4,367.75	17.63	93.38	-166.17	-257.18	-413.14	476.91	367.67	109.25	4.365	
4,600.00	4,477.31	4,465.19	4,464.86	18.04	95.07	-166.05	-257.40	-413.14	501.33	390.03	111.29	4.505	
4,700.00	4,575.17	4,562.51	4,562.17	18.43	96.82	-148.27	-257.67	-413.14	520.28	406.90	113.38	4.589	
4,800.00	4,674.18	4,661.52	4,661.18	18.77	98.74	-110.61	-257.40	-413.14	529.66	414.02	115.64	4.580	
4,900.00	4,773.25	4,761.35	4,761.01	19.07	100.68	-71.16	-257.58	-413.14	529.19	411.30	117.89	4.489	
5,000.00	4,871.30	4,815.00	4,814.66	19.33	101.77	-52.25	-257.67	-413.14	521.15	402.55	118.60	4.394	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #361 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 327-INC-ONLY													0.00 usft
Rule Assigned:													Offset Well Error:
0.00 usft													
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,066.15	4,935.07	4,815.00	4,814.66	19.49	101.77	-45.43	-257.67	-413.14	519.09	402.81	116.28	4.464	
5,100.00	4,967.25	4,815.00	4,814.66	19.57	101.77	-42.92	-257.67	-413.14	519.63	405.21	114.42	4.541	
5,200.00	5,060.05	4,815.00	4,814.66	19.79	101.77	-37.64	-257.67	-413.14	527.48	420.94	106.53	4.951	
5,300.00	5,148.68	4,815.00	4,814.66	20.00	101.77	-34.16	-257.67	-413.14	544.20	448.31	95.89	5.675	
5,400.00	5,232.18	4,815.00	4,814.66	20.19	101.77	-31.56	-257.67	-413.14	568.85	485.05	83.80	6.788	
5,500.00	5,309.62	4,815.00	4,814.66	20.38	101.77	-29.45	-257.67	-413.14	600.19	528.53	71.66	8.376	
5,600.00	5,380.17	4,815.00	4,814.66	20.57	101.77	-27.65	-257.67	-413.14	636.93	576.10	60.83	10.470	
5,700.00	5,443.04	4,815.00	4,814.66	20.77	101.77	-26.06	-257.67	-413.14	677.83	625.23	52.59	12.888	
5,799.99	5,497.55	4,815.00	4,814.66	20.98	101.77	-24.63	-257.67	-413.14	721.75	673.71	48.04	15.024	
5,900.00	5,547.55	4,815.00	4,814.66	21.24	101.77	-24.61	-257.67	-413.14	771.94	724.46	47.49	16.256	
5,999.99	5,597.55	4,815.00	4,814.66	21.54	101.77	-24.61	-257.67	-413.14	831.16	781.33	49.83	16.680	
6,100.00	5,639.98	4,815.00	4,814.66	21.86	101.77	-21.66	-257.67	-413.14	891.82	837.54	54.28	16.431	
6,200.00	5,666.06	4,815.00	4,814.66	22.21	101.77	-19.36	-257.67	-413.14	946.70	886.26	60.44	15.662	
6,299.99	5,675.00	4,815.00	4,814.66	22.54	101.77	-17.60	-257.67	-413.14	995.24	927.70	67.53	14.737	
6,400.00	5,675.00	4,815.00	4,814.66	22.90	101.77	-17.58	-257.67	-413.14	1,044.06	969.48	74.57	14.000	
6,500.00	5,675.00	4,815.00	4,814.66	23.32	101.77	-17.58	-257.67	-413.14	1,099.82	1,018.96	80.86	13.602	
6,600.00	5,675.00	4,815.00	4,814.66	23.78	101.77	-17.58	-257.67	-413.14	1,161.53	1,075.20	86.33	13.454	
6,700.00	5,675.00	4,815.00	4,814.66	24.29	101.77	-17.58	-257.67	-413.14	1,228.29	1,137.26	91.03	13.493	
6,800.00	5,675.00	4,815.00	4,814.66	24.84	101.77	-17.58	-257.67	-413.14	1,299.33	1,204.28	95.05	13.671	
6,900.00	5,675.00	4,815.00	4,814.66	25.43	101.77	-17.58	-257.67	-413.14	1,373.98	1,275.52	98.46	13.955	
7,000.00	5,675.00	4,815.00	4,814.66	26.06	101.77	-17.58	-257.67	-413.14	1,451.67	1,350.31	101.36	14.321	
7,100.00	5,675.00	4,815.00	4,814.66	26.72	101.77	-17.58	-257.67	-413.14	1,531.96	1,428.12	103.84	14.753	
7,200.00	5,675.00	4,815.00	4,814.66	27.41	101.77	-17.58	-257.67	-413.14	1,614.45	1,508.50	105.95	15.237	
7,300.00	5,675.00	4,815.00	4,814.66	28.13	101.77	-17.58	-257.67	-413.14	1,698.83	1,591.06	107.77	15.764	
7,400.00	5,675.00	4,815.00	4,814.66	28.88	101.77	-17.58	-257.67	-413.14	1,784.81	1,675.48	109.33	16.325	
7,500.00	5,675.00	4,815.00	4,814.66	29.66	101.77	-17.58	-257.67	-413.14	1,872.19	1,761.51	110.69	16.914	
7,600.00	5,675.00	4,815.00	4,814.66	30.45	101.77	-17.58	-257.67	-413.14	1,960.78	1,848.92	111.86	17.528	
7,700.00	5,675.00	4,815.00	4,814.66	31.27	101.77	-17.58	-257.67	-413.14	2,050.42	1,937.52	112.89	18.162	
7,800.00	5,675.00	4,815.00	4,814.66	32.10	101.77	-17.58	-257.67	-413.14	2,140.97	2,027.17	113.80	18.814	
7,900.00	5,675.00	4,815.00	4,814.66	32.95	101.77	-17.58	-257.67	-413.14	2,232.33	2,117.74	114.60	19.480	
8,000.00	5,675.00	4,815.00	4,814.66	33.82	101.77	-17.58	-257.67	-413.14	2,324.40	2,209.10	115.30	20.159	
8,100.00	5,675.00	4,815.00	4,814.66	34.70	101.77	-17.58	-257.67	-413.14	2,417.11	2,301.18	115.93	20.849	
8,200.00	5,675.00	4,815.00	4,814.66	35.60	101.77	-17.58	-257.67	-413.14	2,510.37	2,393.88	116.49	21.549	
8,300.00	5,675.00	4,815.00	4,814.66	36.51	101.77	-17.58	-257.67	-413.14	2,604.13	2,487.13	117.00	22.258	
8,400.00	5,675.00	4,815.00	4,814.66	37.43	101.77	-17.58	-257.67	-413.14	2,698.34	2,580.89	117.46	22.973	
8,500.00	5,675.00	4,815.00	4,814.66	38.37	101.77	-17.58	-257.67	-413.14	2,792.96	2,675.09	117.87	23.696	
8,600.00	5,675.00	4,815.00	4,814.66	39.31	101.77	-17.58	-257.67	-413.14	2,887.93	2,769.69	118.24	24.424	
8,700.00	5,675.00	4,815.00	4,814.66	40.26	101.77	-17.58	-257.67	-413.14	2,983.24	2,864.65	118.58	25.157	
8,800.00	5,675.00	4,815.00	4,814.66	41.22	101.77	-17.58	-257.67	-413.14	3,078.84	2,959.94	118.90	25.895	
8,900.00	5,675.00	4,815.00	4,814.66	42.19	101.77	-17.58	-257.67	-413.14	3,174.71	3,055.53	119.19	26.637	
9,000.00	5,675.00	4,815.00	4,814.66	43.17	101.77	-17.58	-257.67	-413.14	3,270.83	3,151.38	119.45	27.382	
9,100.00	5,675.00	4,815.00	4,814.66	44.15	101.77	-17.58	-257.67	-413.14	3,367.18	3,247.48	119.70	28.131	
9,200.00	5,675.00	4,815.00	4,814.66	45.14	101.77	-17.58	-257.67	-413.14	3,463.73	3,343.81	119.93	28.882	
9,300.00	5,675.00	4,815.00	4,814.66	46.14	101.77	-17.58	-257.67	-413.14	3,560.48	3,440.34	120.14	29.636	
9,400.00	5,675.00	4,815.00	4,814.66	47.15	101.77	-17.58	-257.67	-413.14	3,657.40	3,537.06	120.34	30.393	
9,500.00	5,675.00	4,815.00	4,814.66	48.15	101.77	-17.58	-257.67	-413.14	3,754.48	3,633.95	120.53	31.151	
9,600.00	5,675.00	4,815.00	4,814.66	49.17	101.77	-17.58	-257.67	-413.14	3,851.71	3,731.01	120.70	31.911	
9,700.00	5,675.00	4,815.00	4,814.66	50.19	101.77	-17.58	-257.67	-413.14	3,949.08	3,828.21	120.87	32.673	
9,800.00	5,675.00	4,815.00	4,814.66	51.21	101.77	-17.58	-257.67	-413.14	4,046.57	3,925.55	121.02	33.436	
9,900.00	5,675.00	4,815.00	4,814.66	52.24	101.77	-17.58	-257.67	-413.14	4,144.19	4,023.02	121.17	34.201	
10,000.00	5,675.00	4,815.00	4,814.66	53.27	101.77	-17.58	-257.67	-413.14	4,241.92	4,120.60	121.31	34.966	
10,100.00	5,675.00	4,815.00	4,814.66	54.31	101.77	-17.58	-257.67	-413.14	4,339.75	4,218.30	121.45	35.733	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design:OCHO_TESORO OFFSETS - BURCH KEELY UNIT #361 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 327-INC-ONLY												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)		Reference	Offset	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,200.00	5,675.00	4,815.00	4,814.66		55.34	101.77	-257.67	-413.14	4,437.67	4,316.09	121.58	36.500	
10,300.00	5,675.00	4,815.00	4,814.66		56.39	101.77	-257.67	-413.14	4,535.69	4,413.99	121.70	37.268	
10,400.00	5,675.00	4,815.00	4,814.66		57.43	101.77	-257.67	-413.14	4,633.79	4,511.97	121.82	38.037	
10,500.00	5,675.00	4,815.00	4,814.66		58.48	101.77	-257.67	-413.14	4,731.98	4,610.04	121.94	38.806	
10,600.00	5,675.00	4,815.00	4,814.66		59.53	101.77	-257.67	-413.14	4,830.23	4,708.18	122.05	39.576	
10,700.00	5,675.00	4,815.00	4,814.66		60.59	101.77	-257.67	-413.14	4,928.56	4,806.40	122.16	40.346	

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #656 - Wellbore #1 - Wellbore #1														Offset Site Error:	0.00 usft
Survey Program: 167-INC-ONLY		Offset		Semi Major Axis			Offset Wellbore Centre			Rule Assigned:				Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.00	0.00	0.00	0.00	0.00	0.00	-141.25	-1,279.32	-1,026.69	1,640.37						
100.00	100.00	93.00	93.00	0.29	0.75	-141.25	-1,279.32	-1,026.69	1,640.35	1,639.32	1.03	1,589.573			
200.00	200.00	193.00	193.00	0.65	1.80	-141.25	-1,279.32	-1,026.69	1,640.35	1,637.90	2.45	670.392			
300.00	300.00	293.00	293.00	1.00	3.60	-141.25	-1,279.32	-1,026.69	1,640.35	1,635.75	4.60	356.381			
400.00	399.98	392.98	392.98	1.35	5.42	-32.40	-1,279.32	-1,026.69	1,638.88	1,632.10	6.78	241.821			
500.00	499.84	490.71	490.71	1.70	7.21	-32.54	-1,279.21	-1,026.69	1,634.38	1,625.47	8.91	183.446			
600.00	599.45	592.45	592.45	2.05	9.26	-32.79	-1,279.32	-1,026.69	1,627.12	1,615.80	11.31	143.825			
700.00	698.70	691.70	691.70	2.41	11.45	-33.14	-1,279.32	-1,026.69	1,616.87	1,603.01	13.86	116.652			
800.00	797.47	789.01	789.01	2.77	13.60	-33.57	-1,278.82	-1,026.69	1,603.36	1,586.99	16.37	97.963			
900.00	895.62	884.09	884.08	3.14	15.70	-34.12	-1,279.04	-1,026.69	1,587.61	1,568.78	18.83	84.333			
1,000.00	993.06	983.06	983.05	3.52	18.05	-34.80	-1,279.06	-1,026.69	1,568.92	1,547.38	21.54	72.839			
1,100.00	1,089.87	1,082.91	1,082.87	3.91	20.68	-35.41	-1,279.32	-1,026.69	1,548.44	1,523.91	24.53	63.123			
1,200.00	1,186.65	1,179.70	1,179.65	4.30	22.99	-35.95	-1,279.32	-1,026.69	1,527.78	1,500.59	27.19	56.182			
1,300.00	1,283.44	1,269.89	1,269.83	4.69	25.00	-36.47	-1,279.11	-1,026.69	1,507.10	1,477.53	29.57	50.972			
1,400.00	1,380.22	1,373.27	1,373.22	5.09	27.20	-37.08	-1,279.32	-1,026.69	1,486.87	1,454.74	32.13	46.272			
1,500.00	1,477.00	1,460.48	1,460.42	5.49	29.03	-37.60	-1,279.11	-1,026.69	1,466.49	1,432.17	34.33	42.723			
1,600.00	1,573.78	1,566.85	1,566.78	5.89	30.95	-38.27	-1,279.32	-1,026.69	1,446.55	1,409.94	36.61	39.507			
1,700.00	1,670.56	1,663.63	1,663.56	6.29	32.63	-38.89	-1,279.32	-1,026.69	1,426.63	1,387.97	38.66	36.902			
1,800.00	1,767.35	1,758.78	1,758.71	6.69	34.28	-39.49	-1,278.67	-1,026.69	1,406.33	1,365.65	40.68	34.571			
1,900.00	1,864.13	1,852.59	1,852.51	7.10	35.90	-40.13	-1,278.92	-1,026.69	1,386.97	1,344.29	42.68	32.499			
2,000.00	1,960.91	1,953.99	1,953.91	7.50	37.67	-40.84	-1,279.32	-1,026.69	1,367.91	1,323.08	44.82	30.517			
2,100.00	2,057.69	2,050.77	2,050.69	7.90	39.43	-41.53	-1,279.32	-1,026.69	1,348.70	1,301.74	46.96	28.720			
2,200.00	2,154.47	2,147.55	2,147.47	8.31	41.19	-42.24	-1,279.32	-1,026.69	1,329.70	1,280.60	49.10	27.083			
2,300.00	2,251.26	2,243.99	2,243.91	8.71	42.94	-42.97	-1,279.25	-1,026.69	1,310.84	1,259.61	51.23	25.587			
2,400.00	2,348.04	2,340.39	2,340.31	9.12	44.69	-43.71	-1,279.29	-1,026.69	1,292.30	1,238.93	53.36	24.216			
2,500.00	2,444.82	2,437.90	2,437.82	9.52	46.58	-44.49	-1,279.32	-1,026.69	1,273.97	1,218.33	55.64	22.896			
2,600.00	2,541.62	2,534.70	2,534.62	9.93	48.55	-39.55	-1,279.32	-1,026.69	1,255.31	1,197.32	57.99	21.647			
2,699.99	2,638.44	2,628.76	2,628.67	10.33	50.45	-32.13	-1,278.66	-1,026.69	1,234.23	1,173.95	60.28	20.476			
2,800.00	2,735.22	2,721.36	2,721.27	10.74	52.33	-32.07	-1,279.07	-1,026.69	1,213.05	1,150.51	62.54	19.398			
2,900.00	2,832.01	2,825.10	2,825.01	11.14	54.30	-32.76	-1,279.32	-1,026.69	1,191.82	1,126.95	64.87	18.372			
3,000.00	2,928.79	2,921.88	2,921.79	11.54	56.07	-33.42	-1,279.32	-1,026.69	1,170.54	1,103.52	67.02	17.466			
3,100.00	3,025.57	3,017.99	3,017.89	11.95	57.82	-34.08	-1,278.49	-1,026.69	1,148.65	1,079.50	69.15	16.610			
3,200.00	3,122.35	3,111.94	3,111.84	12.35	59.54	-34.77	-1,278.68	-1,026.69	1,127.87	1,056.61	71.25	15.829			
3,300.00	3,219.14	3,205.97	3,205.86	12.76	61.25	-35.49	-1,279.13	-1,026.69	1,107.50	1,034.14	73.36	15.097			
3,400.00	3,315.92	3,309.03	3,308.92	13.16	63.08	-36.31	-1,279.32	-1,026.69	1,087.06	1,011.49	75.56	14.386			
3,500.00	3,412.70	3,405.81	3,405.70	13.57	64.78	-37.10	-1,279.32	-1,026.69	1,066.65	989.01	77.65	13.737			
3,600.00	3,509.48	3,502.10	3,501.98	13.97	66.46	-37.91	-1,279.15	-1,026.69	1,046.30	966.57	79.72	13.124			
3,700.00	3,606.27	3,598.10	3,597.99	14.38	68.14	-38.76	-1,279.24	-1,026.69	1,026.40	944.60	81.80	12.548			
3,800.00	3,703.05	3,696.16	3,696.05	14.78	69.90	-39.65	-1,279.32	-1,026.69	1,006.72	922.78	83.95	11.992			
3,900.00	3,799.83	3,792.94	3,792.83	15.19	71.68	-40.57	-1,279.32	-1,026.69	987.22	901.10	86.12	11.463			
4,000.00	3,896.61	3,889.70	3,889.58	15.60	73.46	-41.52	-1,278.80	-1,026.69	967.48	879.18	88.30	10.957			
4,100.00	3,993.40	3,984.89	3,984.78	16.00	75.21	-42.50	-1,278.88	-1,026.69	948.60	858.14	90.45	10.487			
4,200.00	4,090.18	4,080.14	4,080.02	16.41	76.96	-43.52	-1,279.14	-1,026.69	930.18	837.56	92.61	10.044			
4,300.00	4,186.96	4,180.08	4,179.96	16.82	78.77	-44.63	-1,279.32	-1,026.69	911.99	817.16	94.83	9.617			
4,400.00	4,283.74	4,276.86	4,276.74	17.23	80.50	-45.74	-1,279.32	-1,026.69	893.97	796.99	96.97	9.219			
4,500.00	4,380.53	4,373.35	4,373.23	17.63	82.22	-46.89	-1,278.82	-1,026.69	875.81	776.69	99.11	8.836			
4,600.00	4,477.31	4,468.61	4,468.49	18.04	83.93	-47.25	-1,278.94	-1,026.69	858.63	757.39	101.24	8.481			
4,700.00	4,575.17	4,564.97	4,564.85	18.43	85.65	-28.97	-1,279.24	-1,026.69	843.19	739.83	103.36	8.158			
4,800.00	4,674.18	4,656.00	4,655.88	18.77	87.25	10.22	-1,279.32	-1,026.69	829.92	724.62	105.30	7.882			
4,875.78	4,749.31	4,656.00	4,655.88	19.00	87.25	43.47	-1,279.32	-1,026.69	825.77	720.66	105.11	7.856 CC, ES, SF			
4,900.00	4,773.25	4,656.00	4,655.88	19.07	87.25	51.31	-1,279.32	-1,026.69	826.19	721.32	104.87	7.878			
5,000.00	4,871.30	4,656.00	4,655.88	19.33	87.25	70.68	-1,279.32	-1,026.69	836.86	733.86	103.00	8.125			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #656 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 167-INC-ONLY				Offset			Semi Major Axis		Rule Assigned:				Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Distance Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,100.00	4,967.25	4,656.00	4,655.88	19.57	87.25	78.57	-1,279.32	-1,026.69	861.28	761.25	100.03	8.611		
5,200.00	5,060.05	4,656.00	4,655.88	19.79	87.25	81.33	-1,279.32	-1,026.69	898.07	801.63	96.44	9.312		
5,300.00	5,148.68	4,656.00	4,655.88	20.00	87.25	81.26	-1,279.32	-1,026.69	945.42	852.65	92.77	10.191		
5,400.00	5,232.18	4,656.00	4,655.88	20.19	87.25	79.30	-1,279.32	-1,026.69	1,001.36	911.91	89.45	11.195		
5,500.00	5,309.62	4,656.00	4,655.88	20.38	87.25	75.94	-1,279.32	-1,026.69	1,063.96	977.20	86.76	12.263		
5,600.00	5,380.17	4,656.00	4,655.88	20.57	87.25	71.53	-1,279.32	-1,026.69	1,131.50	1,046.65	84.85	13.335		
5,700.00	5,443.04	4,656.00	4,655.88	20.77	87.25	66.39	-1,279.32	-1,026.69	1,202.48	1,118.74	83.74	14.359		
5,799.99	5,497.55	4,656.00	4,655.88	20.98	87.25	60.85	-1,279.32	-1,026.69	1,275.59	1,192.20	83.39	15.297		
5,900.00	5,547.55	4,656.00	4,655.88	21.24	87.25	60.77	-1,279.32	-1,026.69	1,351.07	1,267.61	83.47	16.187		
5,999.99	5,597.55	4,656.00	4,655.88	21.54	87.25	60.77	-1,279.32	-1,026.69	1,429.55	1,345.88	83.67	17.086		
6,100.00	5,639.98	4,656.00	4,655.88	21.86	87.25	50.55	-1,279.32	-1,026.69	1,507.86	1,423.59	84.27	17.894		
6,200.00	5,666.06	4,656.00	4,655.88	22.21	87.25	42.58	-1,279.32	-1,026.69	1,581.78	1,496.27	85.51	18.498		
6,299.99	5,675.00	4,656.00	4,655.88	22.54	87.25	36.66	-1,279.32	-1,026.69	1,649.82	1,562.56	87.26	18.907		
6,400.00	5,675.00	4,656.00	4,655.88	22.90	87.25	36.59	-1,279.32	-1,026.69	1,716.05	1,626.89	89.15	19.248		
6,500.00	5,675.00	4,656.00	4,655.88	23.32	87.25	36.59	-1,279.32	-1,026.69	1,785.41	1,694.52	90.89	19.643		
6,600.00	5,675.00	4,656.00	4,655.88	23.78	87.25	36.59	-1,279.32	-1,026.69	1,857.58	1,765.10	92.47	20.088		
6,700.00	5,675.00	4,656.00	4,655.88	24.29	87.25	36.59	-1,279.32	-1,026.69	1,932.22	1,838.31	93.91	20.576		
6,800.00	5,675.00	4,656.00	4,655.88	24.84	87.25	36.59	-1,279.32	-1,026.69	2,009.07	1,913.86	95.21	21.102		
6,900.00	5,675.00	4,656.00	4,655.88	25.43	87.25	36.59	-1,279.32	-1,026.69	2,087.88	1,991.50	96.38	21.663		
7,000.00	5,675.00	4,656.00	4,655.88	26.06	87.25	36.59	-1,279.32	-1,026.69	2,168.44	2,071.00	97.44	22.254		
7,100.00	5,675.00	4,656.00	4,655.88	26.72	87.25	36.59	-1,279.32	-1,026.69	2,250.56	2,152.15	98.40	22.871		
7,200.00	5,675.00	4,656.00	4,655.88	27.41	87.25	36.59	-1,279.32	-1,026.69	2,334.07	2,234.80	99.27	23.511		
7,300.00	5,675.00	4,656.00	4,655.88	28.13	87.25	36.59	-1,279.32	-1,026.69	2,418.84	2,318.77	100.06	24.173		
7,400.00	5,675.00	4,656.00	4,655.88	28.88	87.25	36.59	-1,279.32	-1,026.69	2,504.73	2,403.95	100.78	24.853		
7,500.00	5,675.00	4,656.00	4,655.88	29.66	87.25	36.59	-1,279.32	-1,026.69	2,591.63	2,490.20	101.44	25.550		
7,600.00	5,675.00	4,656.00	4,655.88	30.45	87.25	36.59	-1,279.32	-1,026.69	2,679.45	2,577.42	102.03	26.261		
7,700.00	5,675.00	4,656.00	4,655.88	31.27	87.25	36.59	-1,279.32	-1,026.69	2,768.09	2,665.51	102.58	26.985		
7,800.00	5,675.00	4,656.00	4,655.88	32.10	87.25	36.59	-1,279.32	-1,026.69	2,857.48	2,754.41	103.08	27.722		
7,900.00	5,675.00	4,656.00	4,655.88	32.95	87.25	36.59	-1,279.32	-1,026.69	2,947.56	2,844.02	103.54	28.469		
8,000.00	5,675.00	4,656.00	4,655.88	33.82	87.25	36.59	-1,279.32	-1,026.69	3,038.25	2,934.29	103.96	29.226		
8,100.00	5,675.00	4,656.00	4,655.88	34.70	87.25	36.59	-1,279.32	-1,026.69	3,129.51	3,025.17	104.35	29.991		
8,200.00	5,675.00	4,656.00	4,655.88	35.60	87.25	36.59	-1,279.32	-1,026.69	3,221.30	3,116.59	104.71	30.764		
8,300.00	5,675.00	4,656.00	4,655.88	36.51	87.25	36.59	-1,279.32	-1,026.69	3,313.55	3,208.51	105.04	31.544		
8,400.00	5,675.00	4,656.00	4,655.88	37.43	87.25	36.59	-1,279.32	-1,026.69	3,406.25	3,300.89	105.36	32.331		
8,500.00	5,675.00	4,656.00	4,655.88	38.37	87.25	36.59	-1,279.32	-1,026.69	3,499.34	3,393.70	105.65	33.123		
8,600.00	5,675.00	4,656.00	4,655.88	39.31	87.25	36.59	-1,279.32	-1,026.69	3,592.81	3,486.89	105.92	33.921		
8,700.00	5,675.00	4,656.00	4,655.88	40.26	87.25	36.59	-1,279.32	-1,026.69	3,686.62	3,580.45	106.17	34.723		
8,800.00	5,675.00	4,656.00	4,655.88	41.22	87.25	36.59	-1,279.32	-1,026.69	3,780.75	3,674.34	106.41	35.530		
8,900.00	5,675.00	4,656.00	4,655.88	42.19	87.25	36.59	-1,279.32	-1,026.69	3,875.17	3,768.54	106.63	36.341		
9,000.00	5,675.00	4,656.00	4,655.88	43.17	87.25	36.59	-1,279.32	-1,026.69	3,969.86	3,863.02	106.84	37.156		
9,100.00	5,675.00	4,656.00	4,655.88	44.15	87.25	36.59	-1,279.32	-1,026.69	4,064.81	3,957.77	107.04	37.973		
9,200.00	5,675.00	4,656.00	4,655.88	45.14	87.25	36.59	-1,279.32	-1,026.69	4,160.00	4,052.77	107.23	38.794		
9,300.00	5,675.00	4,656.00	4,655.88	46.14	87.25	36.59	-1,279.32	-1,026.69	4,255.41	4,147.99	107.41	39.618		
9,400.00	5,675.00	4,656.00	4,655.88	47.15	87.25	36.59	-1,279.32	-1,026.69	4,351.02	4,243.44	107.58	40.443		
9,500.00	5,675.00	4,656.00	4,655.88	48.15	87.25	36.59	-1,279.32	-1,026.69	4,446.82	4,339.08	107.75	41.272		
9,600.00	5,675.00	4,656.00	4,655.88	49.17	87.25	36.59	-1,279.32	-1,026.69	4,542.81	4,434.91	107.90	42.102		
9,700.00	5,675.00	4,656.00	4,655.88	50.19	87.25	36.59	-1,279.32	-1,026.69	4,638.97	4,530.92	108.05	42.934		
9,800.00	5,675.00	4,656.00	4,655.88	51.21	87.25	36.59	-1,279.32	-1,026.69	4,735.28	4,627.09	108.19	43.767		
9,900.00	5,675.00	4,656.00	4,655.88	52.24	87.25	36.59	-1,279.32	-1,026.69	4,831.75	4,723.42	108.33	44.603		
10,000.00	5,675.00	4,656.00	4,655.88	53.27	87.25	36.59	-1,279.32	-1,026.69	4,928.35	4,819.89	108.46	45.439		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design:OCHO_TESORO OFFSETS - BURCH KEELY UNIT #788 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 100-MWD+IGRF		Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned: Distance				Offset Well Error:	0.00 usft
Reference	Vertical	Reference	Vertical	Reference	Offset	Highside								
Measured Depth (usft)	Depth (usft)	Measured Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	-171.47	-2,350.76	-352.75	2,377.27					
100.00	100.00	72.42	72.42	0.29	0.13	-171.47	-2,350.73	-352.69	2,377.04	2,376.63	0.42	5,704.934		
200.00	200.00	170.28	170.28	0.65	0.42	-171.47	-2,350.66	-352.59	2,376.96	2,375.89	1.07	2,225.482		
206.82	206.82	176.82	176.82	0.67	0.45	-171.47	-2,350.66	-352.60	2,376.95	2,375.84	1.12	2,131.492		
300.00	300.00	264.21	264.21	1.00	0.75	-171.46	-2,350.71	-352.88	2,377.06	2,375.31	1.75	1,355.966		
400.00	399.98	369.65	369.65	1.35	1.12	-62.60	-2,350.89	-353.32	2,376.48	2,374.01	2.47	961.416		
500.00	499.84	474.79	474.79	1.70	1.49	-62.76	-2,350.68	-353.69	2,373.94	2,370.75	3.19	744.115		
600.00	599.45	583.37	583.37	2.05	1.88	-63.03	-2,350.25	-353.87	2,369.59	2,365.66	3.93	603.359		
700.00	698.70	684.18	684.17	2.41	2.23	-63.40	-2,349.57	-353.98	2,363.41	2,358.77	4.64	509.180		
800.00	797.47	780.56	780.56	2.77	2.57	-63.87	-2,349.00	-353.82	2,355.78	2,350.44	5.34	441.042		
900.00	895.62	914.65	914.62	3.14	3.04	-64.66	-2,347.63	-351.88	2,346.19	2,340.01	6.18	379.893		
1,000.00	993.06	1,011.91	1,011.84	3.52	3.38	-65.41	-2,345.89	-349.72	2,334.42	2,327.52	6.89	338.768		
1,100.00	1,089.87	1,104.26	1,104.15	3.91	3.71	-66.04	-2,344.27	-347.63	2,321.82	2,314.22	7.59	305.723		
1,200.00	1,186.65	1,194.00	1,193.86	4.30	4.02	-66.60	-2,342.83	-345.61	2,309.58	2,301.29	8.29	278.493		
1,300.00	1,283.44	1,281.70	1,281.53	4.69	4.34	-67.15	-2,341.81	-343.93	2,298.06	2,289.07	8.99	255.647		
1,400.00	1,380.22	1,395.15	1,394.96	5.09	4.74	-67.84	-2,340.12	-342.49	2,286.53	2,276.75	9.78	233.805		
1,500.00	1,477.00	1,505.68	1,505.46	5.49	5.14	-68.51	-2,337.78	-341.65	2,274.70	2,264.14	10.56	215.349		
1,600.00	1,573.78	1,616.20	1,615.92	5.89	5.53	-69.15	-2,334.51	-342.54	2,262.39	2,251.04	11.34	199.424		
1,700.00	1,670.56	1,702.52	1,702.19	6.29	5.83	-69.63	-2,331.69	-343.95	2,250.05	2,238.00	12.05	186.798		
1,800.00	1,767.35	1,792.25	1,791.87	6.69	6.15	-70.13	-2,329.43	-345.80	2,238.62	2,225.86	12.76	175.459		
1,900.00	1,864.13	1,895.99	1,895.55	7.10	6.52	-70.71	-2,326.70	-347.93	2,227.31	2,213.78	13.52	164.725		
2,000.00	1,960.91	1,997.29	1,996.81	7.50	6.88	-71.30	-2,323.76	-349.30	2,215.92	2,201.64	14.28	155.186		
2,100.00	2,057.69	2,082.63	2,082.09	7.90	7.19	-71.79	-2,321.39	-350.83	2,204.89	2,189.91	14.98	147.146		
2,200.00	2,154.47	2,192.84	2,192.24	8.31	7.58	-72.41	-2,318.48	-353.52	2,194.23	2,178.46	15.77	139.113		
2,300.00	2,251.26	2,280.56	2,279.90	8.71	7.89	-72.92	-2,315.93	-355.32	2,183.50	2,167.01	16.49	132.417		
2,400.00	2,348.04	2,384.79	2,384.08	9.12	8.27	-73.54	-2,313.05	-357.01	2,173.15	2,155.89	17.26	125.889		
2,500.00	2,444.82	2,479.91	2,479.15	9.52	8.61	-74.13	-2,310.21	-358.20	2,162.83	2,144.83	18.01	120.111		
2,600.00	2,541.62	2,576.06	2,575.24	9.93	8.96	-69.17	-2,307.41	-359.33	2,152.01	2,133.26	18.75	114.743		
2,699.99	2,638.44	2,674.00	2,673.14	10.33	9.31	-61.91	-2,304.45	-360.42	2,138.24	2,118.74	19.51	109.624		
2,800.00	2,735.22	2,766.78	2,765.87	10.74	9.64	-61.81	-2,301.69	-361.37	2,122.89	2,102.65	20.24	104.907		
2,900.00	2,832.01	2,856.14	2,855.19	11.14	9.96	-62.34	-2,299.34	-362.27	2,108.07	2,087.11	20.95	100.601		
3,000.00	2,928.79	2,955.15	2,954.17	11.54	10.32	-62.93	-2,296.88	-363.30	2,093.59	2,071.89	21.71	96.451		
3,100.00	3,025.57	3,054.72	3,053.70	11.95	10.68	-63.52	-2,294.27	-364.48	2,079.19	2,056.73	22.46	92.570		
3,200.00	3,122.35	3,152.71	3,151.64	12.35	11.03	-64.11	-2,291.62	-365.86	2,064.91	2,041.69	23.21	88.962		
3,300.00	3,219.14	3,243.69	3,242.58	12.76	11.36	-64.66	-2,289.26	-367.16	2,050.95	2,027.01	23.94	85.671		
3,400.00	3,315.92	3,347.94	3,346.78	13.16	11.74	-65.31	-2,286.45	-368.50	2,037.14	2,012.43	24.71	82.434		
3,500.00	3,412.70	3,433.00	3,431.81	13.57	12.04	-65.84	-2,284.13	-369.65	2,023.54	1,998.11	25.42	79.589		
3,600.00	3,509.48	3,514.53	3,513.31	13.97	12.34	-66.36	-2,282.43	-370.54	2,010.82	1,984.70	26.13	76.966		
3,700.00	3,606.27	3,608.57	3,607.34	14.38	12.67	-66.97	-2,281.08	-371.31	1,999.00	1,972.13	26.87	74.399		
3,800.00	3,703.05	3,728.03	3,726.77	14.78	13.10	-67.76	-2,278.77	-372.39	1,986.95	1,959.26	27.69	71.747		
3,900.00	3,799.83	3,819.22	3,817.94	15.19	13.43	-68.37	-2,276.58	-373.06	1,974.73	1,946.30	28.43	69.459		
4,000.00	3,896.61	3,924.16	3,922.77	15.60	13.80	-68.99	-2,274.64	-376.96	1,962.74	1,933.54	29.21	67.203		
4,100.00	3,993.40	4,126.03	4,123.11	16.00	14.54	-69.78	-2,268.01	-399.87	1,948.11	1,917.88	30.24	64.427		
4,200.00	4,090.18	4,222.61	4,218.14	16.41	14.91	-70.01	-2,263.33	-416.51	1,930.80	1,899.81	30.99	62.296		
4,300.00	4,186.96	4,317.63	4,311.54	16.82	15.27	-70.23	-2,259.09	-433.41	1,913.77	1,882.01	31.75	60.272		
4,400.00	4,283.74	4,421.81	4,413.74	17.23	15.68	-70.43	-2,254.52	-453.07	1,896.60	1,864.06	32.54	58.285		
4,500.00	4,380.53	4,524.95	4,514.73	17.63	16.10	-70.60	-2,249.94	-473.52	1,879.19	1,845.86	33.33	56.377		
4,600.00	4,477.31	4,622.85	4,610.56	18.04	16.50	-69.94	-2,245.44	-493.05	1,861.61	1,827.49	34.12	54.562		
4,700.00	4,575.17	4,715.58	4,701.29	18.43	16.89	-50.58	-2,241.42	-511.76	1,843.24	1,808.36	34.88	52.850		
4,800.00	4,674.18	4,768.00	4,752.57	18.77	17.11	-10.64	-2,239.27	-522.45	1,823.97	1,788.48	35.48	51.403		
4,900.00	4,773.25	4,768.00	4,752.57	19.07	17.11	31.21	-2,239.27	-522.45	1,807.83	1,771.99	35.84	50.446		
5,000.00	4,871.30	4,768.00	4,752.57	19.33	17.11	51.93	-2,239.27	-522.45	1,795.85	1,759.78	36.07	49.794		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #788 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 100-MWD+IGRF		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance				Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,100.00	4,967.25	4,768.00	4,752.57	19.57	17.11	61.75	-2,239.27	-522.45	1,788.25	1,752.06	36.18	49.423		
5,200.00	5,060.05	4,768.00	4,752.57	19.79	17.11	67.05	-2,239.27	-522.45	1,785.16	1,748.96	36.20	49.311 SF		
5,217.39	5,075.79	4,768.00	4,752.57	19.83	17.11	67.70	-2,239.27	-522.45	1,785.09	1,748.90	36.20	49.317 CC, ES		
5,300.00	5,148.68	4,768.00	4,752.57	20.00	17.11	70.09	-2,239.27	-522.45	1,786.66	1,750.51	36.14	49.433		
5,400.00	5,232.18	4,768.00	4,752.57	20.19	17.11	71.81	-2,239.27	-522.45	1,792.70	1,756.67	36.03	49.756		
5,500.00	5,309.62	4,768.00	4,752.57	20.38	17.11	72.64	-2,239.27	-522.45	1,803.17	1,767.28	35.89	50.241		
5,600.00	5,380.17	4,768.00	4,752.57	20.57	17.11	72.81	-2,239.27	-522.45	1,817.90	1,782.14	35.75	50.845		
5,700.00	5,443.04	4,768.00	4,752.57	20.77	17.11	72.46	-2,239.27	-522.45	1,836.60	1,800.96	35.65	51.520		
5,799.99	5,497.55	4,768.00	4,752.57	20.98	17.11	71.69	-2,239.27	-522.45	1,858.97	1,823.37	35.60	52.221		
5,900.00	5,547.55	4,768.00	4,752.57	21.24	17.11	71.67	-2,239.27	-522.45	1,885.53	1,849.93	35.60	52.962		
5,999.99	5,597.55	4,768.00	4,752.57	21.54	17.11	71.67	-2,239.27	-522.45	1,916.94	1,881.31	35.64	53.794		
6,100.00	5,639.98	4,768.00	4,752.57	21.86	17.11	68.39	-2,239.27	-522.45	1,950.35	1,914.62	35.73	54.585		
6,200.00	5,666.06	4,768.00	4,752.57	22.21	17.11	65.29	-2,239.27	-522.45	1,982.26	1,946.32	35.94	55.157		
6,299.99	5,675.00	4,768.00	4,752.57	22.54	17.11	62.52	-2,239.27	-522.45	2,011.81	1,975.56	36.25	55.496		
6,400.00	5,675.00	4,768.00	4,752.57	22.90	17.11	62.48	-2,239.27	-522.45	2,042.06	2,005.43	36.63	55.744		
6,500.00	5,675.00	4,768.00	4,752.57	23.32	17.11	62.48	-2,239.27	-522.45	2,076.69	2,039.65	37.04	56.069		
6,600.00	5,675.00	4,768.00	4,752.57	23.78	17.11	62.48	-2,239.27	-522.45	2,115.48	2,078.02	37.46	56.476		
6,700.00	5,675.00	4,768.00	4,752.57	24.29	17.11	62.48	-2,239.27	-522.45	2,158.21	2,120.33	37.88	56.970		
6,800.00	5,675.00	4,768.00	4,752.57	24.84	17.11	62.48	-2,239.27	-522.45	2,204.66	2,166.35	38.31	57.550		
6,900.00	5,675.00	4,768.00	4,752.57	25.43	17.11	62.48	-2,239.27	-522.45	2,254.58	2,215.85	38.73	58.216		
7,000.00	5,675.00	4,768.00	4,752.57	26.06	17.11	62.48	-2,239.27	-522.45	2,307.76	2,268.62	39.14	58.966		
7,100.00	5,675.00	4,768.00	4,752.57	26.72	17.11	62.48	-2,239.27	-522.45	2,363.98	2,324.44	39.53	59.797		
7,200.00	5,675.00	4,768.00	4,752.57	27.41	17.11	62.48	-2,239.27	-522.45	2,423.02	2,383.10	39.91	60.706		
7,300.00	5,675.00	4,768.00	4,752.57	28.13	17.11	62.48	-2,239.27	-522.45	2,484.68	2,444.40	40.28	61.689		
7,400.00	5,675.00	4,768.00	4,752.57	28.88	17.11	62.48	-2,239.27	-522.45	2,548.77	2,508.15	40.62	62.741		
7,500.00	5,675.00	4,768.00	4,752.57	29.66	17.11	62.48	-2,239.27	-522.45	2,615.12	2,574.17	40.95	63.859		
7,600.00	5,675.00	4,768.00	4,752.57	30.45	17.11	62.48	-2,239.27	-522.45	2,683.56	2,642.30	41.26	65.038		
7,700.00	5,675.00	4,768.00	4,752.57	31.27	17.11	62.48	-2,239.27	-522.45	2,753.93	2,712.38	41.55	66.274		
7,800.00	5,675.00	4,768.00	4,752.57	32.10	17.11	62.48	-2,239.27	-522.45	2,826.08	2,784.26	41.83	67.563		
7,900.00	5,675.00	4,768.00	4,752.57	32.95	17.11	62.48	-2,239.27	-522.45	2,899.89	2,857.80	42.09	68.901		
8,000.00	5,675.00	4,768.00	4,752.57	33.82	17.11	62.48	-2,239.27	-522.45	2,975.23	2,932.90	42.33	70.285		
8,100.00	5,675.00	4,768.00	4,752.57	34.70	17.11	62.48	-2,239.27	-522.45	3,051.99	3,009.43	42.56	71.711		
8,200.00	5,675.00	4,768.00	4,752.57	35.60	17.11	62.48	-2,239.27	-522.45	3,130.06	3,087.28	42.77	73.175		
8,300.00	5,675.00	4,768.00	4,752.57	36.51	17.11	62.48	-2,239.27	-522.45	3,209.34	3,166.36	42.98	74.675		
8,400.00	5,675.00	4,768.00	4,752.57	37.43	17.11	62.48	-2,239.27	-522.45	3,289.76	3,246.59	43.17	76.209		
8,500.00	5,675.00	4,768.00	4,752.57	38.37	17.11	62.48	-2,239.27	-522.45	3,371.22	3,327.87	43.35	77.773		
8,600.00	5,675.00	4,768.00	4,752.57	39.31	17.11	62.48	-2,239.27	-522.45	3,453.66	3,410.14	43.52	79.365		
8,700.00	5,675.00	4,768.00	4,752.57	40.26	17.11	62.48	-2,239.27	-522.45	3,537.00	3,493.32	43.68	80.983		
8,800.00	5,675.00	4,768.00	4,752.57	41.22	17.11	62.48	-2,239.27	-522.45	3,621.19	3,577.36	43.83	82.624		
8,900.00	5,675.00	4,768.00	4,752.57	42.19	17.11	62.48	-2,239.27	-522.45	3,706.16	3,662.19	43.97	84.288		
9,000.00	5,675.00	4,768.00	4,752.57	43.17	17.11	62.48	-2,239.27	-522.45	3,791.87	3,747.76	44.11	85.972		
9,100.00	5,675.00	4,768.00	4,752.57	44.15	17.11	62.48	-2,239.27	-522.45	3,878.26	3,834.02	44.23	87.675		
9,200.00	5,675.00	4,768.00	4,752.57	45.14	17.11	62.48	-2,239.27	-522.45	3,965.29	3,920.93	44.36	89.394		
9,300.00	5,675.00	4,768.00	4,752.57	46.14	17.11	62.48	-2,239.27	-522.45	4,052.91	4,008.44	44.47	91.130		
9,400.00	5,675.00	4,768.00	4,752.57	47.15	17.11	62.48	-2,239.27	-522.45	4,141.10	4,096.52	44.59	92.880		
9,500.00	5,675.00	4,768.00	4,752.57	48.15	17.11	62.48	-2,239.27	-522.45	4,229.82	4,185.13	44.69	94.643		
9,600.00	5,675.00	4,768.00	4,752.57	49.17	17.11	62.48	-2,239.27	-522.45	4,319.03	4,274.23	44.79	96.419		
9,700.00	5,675.00	4,768.00	4,752.57	50.19	17.11	62.48	-2,239.27	-522.45	4,408.70	4,363.80	44.89	98.206		
9,800.00	5,675.00	4,768.00	4,752.57	51.21	17.11	62.48	-2,239.27	-522.45	4,498.80	4,453.82	44.99	100.002		
9,900.00	5,675.00	4,768.00	4,752.57	52.24	17.11	62.48	-2,239.27	-522.45	4,589.32	4,544.24	45.08	101.809		
10,000.00	5,675.00	4,768.00	4,752.57	53.27	17.11	62.48	-2,239.27	-522.45	4,680.22	4,635.06	45.17	103.623		
10,100.00	5,675.00	4,768.00	4,752.57	54.31	17.11	62.48	-2,239.27	-522.45	4,771.49	4,726.24	45.25	105.446		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design:	OCHO_TESORO OFFSETS - BURCH KEELY UNIT #788 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program:	100-MWD+IGRF											Offset Well Error:	0.00 usft	
Reference	Offset	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)		Reference (usft)	Offset (usft)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,200.00	5,675.00	4,768.00	4,752.57	55.34	17.11	62.48	-2,239.27	-522.45	4,863.10	4,817.77	45.33	107.275		
10,300.00	5,675.00	4,768.00	4,752.57	56.39	17.11	62.48	-2,239.27	-522.45	4,955.03	4,909.62	45.41	109.111		

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #962H - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 100-MWD+IGRF													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.00	0.00	10,290.00	4,871.54	0.00	172.94	-15.58	332.45	-92.70	4,905.69					
100.00	100.00	10,290.00	4,871.54	0.29	172.94	-15.58	332.45	-92.70	4,805.95	4,758.82	47.13	101.968		
200.00	200.00	10,290.00	4,871.54	0.65	172.94	-15.58	332.45	-92.70	4,706.21	4,659.01	47.20	99.700		
300.00	300.00	10,290.00	4,871.54	1.00	172.94	-15.58	332.45	-92.70	4,606.49	4,559.20	47.29	97.419		
400.00	399.98	10,290.00	4,871.54	1.35	172.94	117.39	332.45	-92.70	4,506.80	4,459.42	47.38	95.115		
500.00	499.84	10,290.00	4,871.54	1.70	172.94	134.06	332.45	-92.70	4,407.27	4,359.77	47.50	92.783		
600.00	599.45	10,290.00	4,871.54	2.05	172.94	144.57	332.45	-92.70	4,308.04	4,260.39	47.64	90.425		
700.00	698.70	10,290.00	4,871.54	2.41	172.94	151.37	332.45	-92.70	4,209.24	4,161.43	47.81	88.043		
800.00	797.47	10,290.00	4,871.54	2.77	172.94	156.00	332.45	-92.70	4,111.03	4,063.02	48.01	85.636		
900.00	895.62	10,290.00	4,871.54	3.14	172.94	159.30	332.45	-92.70	4,013.58	3,965.35	48.24	83.208		
1,000.00	993.06	10,290.00	4,871.54	3.52	172.94	161.76	332.45	-92.70	3,917.08	3,868.58	48.50	80.757		
1,100.00	1,089.87	10,290.00	4,871.54	3.91	172.94	162.35	332.45	-92.70	3,821.45	3,772.64	48.82	78.281		
1,200.00	1,186.65	10,290.00	4,871.54	4.30	172.94	162.35	332.45	-92.70	3,726.10	3,676.92	49.18	75.768		
1,300.00	1,283.44	10,290.00	4,871.54	4.69	172.94	162.35	332.45	-92.70	3,630.99	3,581.42	49.57	73.243		
1,400.00	1,380.22	10,290.00	4,871.54	5.09	172.94	162.35	332.45	-92.70	3,536.16	3,486.15	50.01	70.710		
1,500.00	1,477.00	10,266.29	4,872.01	5.49	172.19	161.61	333.37	-116.40	3,441.53	3,391.23	50.30	68.420		
1,600.00	1,573.78	10,240.91	4,872.51	5.89	171.39	160.78	334.35	-141.75	3,347.03	3,296.40	50.62	66.119		
1,700.00	1,670.56	10,214.95	4,873.02	6.29	170.58	159.91	335.35	-167.68	3,252.65	3,201.67	50.98	63.797		
1,800.00	1,767.35	10,188.55	4,873.53	6.69	169.75	158.99	336.33	-194.06	3,158.41	3,107.02	51.39	61.456		
1,900.00	1,864.13	10,164.82	4,873.99	7.10	169.00	158.13	337.18	-217.77	3,064.31	3,012.43	51.88	59.067		
2,000.00	1,960.91	10,130.88	4,874.64	7.50	167.94	156.87	338.33	-251.69	2,970.37	2,918.03	52.34	56.754		
2,100.00	2,057.69	10,097.49	4,875.19	7.90	166.89	155.57	339.36	-285.06	2,876.54	2,823.67	52.86	54.415		
2,200.00	2,154.47	10,064.63	4,875.66	8.31	165.85	154.24	340.28	-317.90	2,782.84	2,729.38	53.46	52.053		
2,300.00	2,251.26	10,036.41	4,876.01	8.71	164.97	153.05	341.01	-346.11	2,689.31	2,635.13	54.18	49.638		
2,400.00	2,348.04	10,009.37	4,876.33	9.12	164.12	151.86	341.65	-373.13	2,596.00	2,541.00	54.99	47.205		
2,500.00	2,444.82	9,982.44	4,876.63	9.52	163.27	150.64	342.26	-400.06	2,502.94	2,447.03	55.91	44.768		
2,600.00	2,541.62	9,964.00	4,876.83	9.93	162.69	152.11	342.65	-418.49	2,410.31	2,353.26	57.05	42.250		
2,699.99	2,638.44	9,938.81	4,877.11	10.33	161.90	154.60	343.19	-443.68	2,318.68	2,260.30	58.38	39.716		
2,800.00	2,735.22	9,920.32	4,877.35	10.74	161.32	153.98	343.62	-462.16	2,228.02	2,167.98	60.04	37.111		
2,900.00	2,832.01	9,901.64	4,877.62	11.14	160.74	153.01	344.06	-480.84	2,138.00	2,076.11	61.89	34.543		
3,000.00	2,928.79	9,882.76	4,877.91	11.54	160.14	152.01	344.53	-499.70	2,048.71	1,984.74	63.97	32.024		
3,100.00	3,025.57	9,863.25	4,878.25	11.95	159.53	150.96	345.04	-519.21	1,960.24	1,893.95	66.30	29.568		
3,200.00	3,122.35	9,842.34	4,878.63	12.35	158.87	149.81	345.58	-540.11	1,872.69	1,803.81	68.88	27.189		
3,300.00	3,219.14	9,821.19	4,879.03	12.76	158.21	148.63	346.09	-561.24	1,786.17	1,714.41	71.76	24.889		
3,400.00	3,315.92	9,799.80	4,879.47	13.16	157.54	147.42	346.60	-582.62	1,700.85	1,625.86	74.99	22.681		
3,500.00	3,412.70	9,781.04	4,879.87	13.57	156.95	146.34	347.02	-601.37	1,616.91	1,538.28	78.63	20.563		
3,600.00	3,509.48	9,740.83	4,880.64	13.97	155.69	143.97	347.82	-641.57	1,534.48	1,452.09	82.39	18.624		
3,700.00	3,606.27	9,703.55	4,881.00	14.38	154.52	141.71	348.37	-678.85	1,453.67	1,367.04	86.63	16.780		
3,800.00	3,703.05	9,680.00	4,881.05	14.78	153.78	140.26	348.62	-702.39	1,374.84	1,283.27	91.57	15.014		
3,900.00	3,799.83	9,657.58	4,881.08	15.19	153.08	138.86	348.84	-724.81	1,298.57	1,201.51	97.07	13.378		
4,000.00	3,896.61	9,640.21	4,881.16	15.60	152.53	137.76	349.04	-742.18	1,225.43	1,122.22	103.22	11.872		
4,100.00	3,993.40	9,622.39	4,881.29	16.00	151.97	136.62	349.26	-760.00	1,156.00	1,046.06	109.94	10.515		
4,200.00	4,090.18	9,604.10	4,881.49	16.41	151.40	135.44	349.51	-778.29	1,090.96	973.78	117.18	9.310		
4,300.00	4,186.96	9,585.00	4,881.76	16.82	150.80	134.21	349.80	-797.38	1,031.14	906.28	124.85	8.259		
4,400.00	4,283.74	9,565.16	4,882.09	17.23	150.18	132.91	350.12	-817.22	977.46	844.68	132.78	7.362		
4,500.00	4,380.53	9,544.54	4,882.49	17.63	149.53	131.56	350.46	-837.83	930.95	790.28	140.67	6.618		
4,600.00	4,477.31	9,523.50	4,882.95	18.04	148.87	130.79	350.83	-858.86	892.73	744.56	148.17	6.025		
4,700.00	4,575.17	9,507.36	4,883.34	18.43	148.37	146.08	351.13	-874.99	863.03	708.03	155.01	5.568		
4,800.00	4,674.18	9,500.62	4,883.52	18.77	148.15	-176.99	351.25	-881.73	842.66	681.87	160.79	5.241		
4,900.00	4,773.25	9,503.66	4,883.44	19.07	148.25	-136.50	351.20	-878.69	832.76	667.77	165.00	5.047		
4,940.91	4,813.55	9,507.80	4,883.33	19.18	148.38	-126.07	351.12	-874.55	831.85	665.66	166.19	5.005 CC, ES		
5,000.00	4,871.30	9,516.80	4,883.11	19.33	148.66	-115.55	350.95	-865.56	833.72	666.36	167.36	4.982 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #962H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 100-MWD+IGRF												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,100.00	4,967.25	9,540.24	4,882.58	19.57	149.40	-103.94	350.54	-842.13	845.00	677.10	167.90	5.033	
5,200.00	5,060.05	9,574.07	4,881.93	19.79	150.46	-95.45	349.97	-808.31	865.22	698.32	166.90	5.184	
5,300.00	5,148.68	9,617.65	4,881.34	20.00	151.82	-88.05	349.32	-764.74	892.44	727.61	164.83	5.414	
5,400.00	5,232.18	9,671.25	4,881.05	20.19	153.51	-81.13	348.70	-711.14	924.38	762.15	162.23	5.698	
5,500.00	5,309.62	9,735.25	4,880.72	20.38	155.51	-74.58	347.91	-647.15	958.64	799.12	159.52	6.009	
5,600.00	5,380.17	9,807.32	4,879.32	20.57	157.77	-68.57	346.42	-575.11	993.12	836.22	156.90	6.330	
5,700.00	5,443.04	9,887.93	4,877.83	20.77	160.31	-63.22	344.40	-494.54	1,025.74	871.07	154.67	6.632	
5,799.99	5,497.55	9,970.40	4,876.76	20.98	162.89	-58.83	342.52	-412.10	1,055.09	902.18	152.91	6.900	
5,900.00	5,547.55	10,059.47	4,875.72	21.24	165.69	-56.59	340.42	-323.06	1,083.00	931.52	151.48	7.149	
5,999.99	5,597.55	10,147.67	4,874.33	21.54	168.46	-54.47	337.77	-234.91	1,112.36	962.45	149.91	7.420	
6,100.00	5,639.98	10,240.82	4,872.51	21.86	171.39	-50.56	334.36	-141.84	1,138.02	989.14	148.88	7.644	
6,200.00	5,666.06	10,290.00	4,871.54	22.21	172.94	-48.61	332.45	-92.70	1,154.49	1,006.24	148.25	7.787	
6,299.99	5,675.00	10,290.00	4,871.54	22.54	172.94	-47.67	332.45	-92.70	1,166.97	1,019.60	147.37	7.919	
6,400.00	5,675.00	10,290.00	4,871.54	22.90	172.94	-47.66	332.45	-92.70	1,181.91	1,035.62	146.30	8.079	
6,500.00	5,675.00	10,290.00	4,871.54	23.32	172.94	-47.66	332.45	-92.70	1,205.00	1,060.56	144.44	8.342	
6,600.00	5,675.00	10,290.00	4,871.54	23.78	172.94	-47.66	332.45	-92.70	1,235.77	1,093.85	141.92	8.707	
6,700.00	5,675.00	10,290.00	4,871.54	24.29	172.94	-47.66	332.45	-92.70	1,273.67	1,134.80	138.87	9.172	
6,800.00	5,675.00	10,290.00	4,871.54	24.84	172.94	-47.66	332.45	-92.70	1,318.08	1,182.66	135.42	9.733	
6,900.00	5,675.00	10,290.00	4,871.54	25.43	172.94	-47.66	332.45	-92.70	1,368.37	1,236.65	131.72	10.389	
7,000.00	5,675.00	10,290.00	4,871.54	26.06	172.94	-47.66	332.45	-92.70	1,423.91	1,296.04	127.88	11.135	
7,100.00	5,675.00	10,290.00	4,871.54	26.72	172.94	-47.66	332.45	-92.70	1,484.13	1,360.13	123.99	11.969	
7,200.00	5,675.00	10,290.00	4,871.54	27.41	172.94	-47.66	332.45	-92.70	1,548.46	1,428.32	120.15	12.888	
7,300.00	5,675.00	10,290.00	4,871.54	28.13	172.94	-47.66	332.45	-92.70	1,616.43	1,500.04	116.39	13.888	
7,400.00	5,675.00	10,290.00	4,871.54	28.88	172.94	-47.66	332.45	-92.70	1,687.58	1,574.83	112.76	14.967	
7,500.00	5,675.00	10,290.00	4,871.54	29.66	172.94	-47.66	332.45	-92.70	1,761.54	1,652.27	109.28	16.120	
7,600.00	5,675.00	10,290.00	4,871.54	30.45	172.94	-47.66	332.45	-92.70	1,837.97	1,732.00	105.97	17.345	
7,700.00	5,675.00	10,290.00	4,871.54	31.27	172.94	-47.66	332.45	-92.70	1,916.57	1,813.74	102.83	18.638	
7,800.00	5,675.00	10,290.00	4,871.54	32.10	172.94	-47.66	332.45	-92.70	1,997.08	1,897.21	99.87	19.997	
7,900.00	5,675.00	10,290.00	4,871.54	32.95	172.94	-47.66	332.45	-92.70	2,079.29	1,982.21	97.08	21.419	
8,000.00	5,675.00	10,290.00	4,871.54	33.82	172.94	-47.66	332.45	-92.70	2,163.00	2,068.54	94.45	22.900	
8,100.00	5,675.00	10,290.00	4,871.54	34.70	172.94	-47.66	332.45	-92.70	2,248.03	2,156.04	91.99	24.438	
8,200.00	5,675.00	10,290.00	4,871.54	35.60	172.94	-47.66	332.45	-92.70	2,334.26	2,244.58	89.68	26.030	
8,300.00	5,675.00	10,290.00	4,871.54	36.51	172.94	-47.66	332.45	-92.70	2,421.54	2,334.04	87.50	27.674	
8,400.00	5,675.00	10,290.00	4,871.54	37.43	172.94	-47.66	332.45	-92.70	2,509.77	2,424.31	85.46	29.367	
8,500.00	5,675.00	10,290.00	4,871.54	38.37	172.94	-47.66	332.45	-92.70	2,598.86	2,515.31	83.55	31.106	
8,600.00	5,675.00	10,290.00	4,871.54	39.31	172.94	-47.66	332.45	-92.70	2,688.71	2,606.96	81.75	32.889	
8,700.00	5,675.00	10,290.00	4,871.54	40.26	172.94	-47.66	332.45	-92.70	2,779.26	2,699.20	80.06	34.715	
8,800.00	5,675.00	10,290.00	4,871.54	41.22	172.94	-47.66	332.45	-92.70	2,870.43	2,791.96	78.47	36.580	
8,900.00	5,675.00	10,290.00	4,871.54	42.19	172.94	-47.66	332.45	-92.70	2,962.17	2,885.20	76.98	38.482	
9,000.00	5,675.00	10,290.00	4,871.54	43.17	172.94	-47.66	332.45	-92.70	3,054.43	2,978.87	75.57	40.420	
9,100.00	5,675.00	10,290.00	4,871.54	44.15	172.94	-47.66	332.45	-92.70	3,147.17	3,072.93	74.24	42.391	
9,200.00	5,675.00	10,290.00	4,871.54	45.14	172.94	-47.66	332.45	-92.70	3,240.33	3,167.34	72.99	44.394	
9,300.00	5,675.00	10,290.00	4,871.54	46.14	172.94	-47.66	332.45	-92.70	3,333.90	3,262.09	71.81	46.427	
9,400.00	5,675.00	10,290.00	4,871.54	47.15	172.94	-47.66	332.45	-92.70	3,427.82	3,357.13	70.70	48.487	
9,500.00	5,675.00	10,290.00	4,871.54	48.15	172.94	-47.66	332.45	-92.70	3,522.08	3,452.44	69.64	50.574	
9,600.00	5,675.00	10,290.00	4,871.54	49.17	172.94	-47.66	332.45	-92.70	3,616.65	3,548.01	68.65	52.685	
9,700.00	5,675.00	10,290.00	4,871.54	50.19	172.94	-47.66	332.45	-92.70	3,711.51	3,643.80	67.70	54.820	
9,800.00	5,675.00	10,290.00	4,871.54	51.21	172.94	-47.66	332.45	-92.70	3,806.62	3,739.81	66.81	56.976	
9,900.00	5,675.00	10,290.00	4,871.54	52.24	172.94	-47.66	332.45	-92.70	3,901.98	3,836.02	65.97	59.152	
10,000.00	5,675.00	10,290.00	4,871.54	53.27	172.94	-47.66	332.45	-92.70	3,997.57	3,932.41	65.16	61.346	
10,100.00	5,675.00	10,290.00	4,871.54	54.31	172.94	-47.66	332.45	-92.70	4,093.37	4,028.97	64.40	63.558	
10,200.00	5,675.00	10,290.00	4,871.54	55.34	172.94	-47.66	332.45	-92.70	4,189.37	4,125.68	63.68	65.786	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design:OCHO_TESORO OFFSETS - BURCH KEELY UNIT #962H - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 100-MWD+IGRF													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
10,300.00	5,675.00	10,290.00	4,871.54	56.39	172.94	-47.66	332.45	-92.70	4,285.54	4,222.55	63.00	68.028		
10,400.00	5,675.00	10,290.00	4,871.54	57.43	172.94	-47.66	332.45	-92.70	4,381.89	4,319.55	62.35	70.284		
10,500.00	5,675.00	10,290.00	4,871.54	58.48	172.94	-47.66	332.45	-92.70	4,478.40	4,416.68	61.73	72.553		
10,600.00	5,675.00	10,290.00	4,871.54	59.53	172.94	-47.66	332.45	-92.70	4,575.06	4,513.93	61.14	74.833		
10,700.00	5,675.00	10,290.00	4,871.54	60.59	172.94	-47.66	332.45	-92.70	4,671.86	4,611.29	60.58	77.123		
10,800.00	5,675.00	10,290.00	4,871.54	61.64	172.94	-47.66	332.45	-92.70	4,768.79	4,708.75	60.04	79.423		
10,900.00	5,675.00	10,290.00	4,871.54	62.70	172.94	-47.66	332.45	-92.70	4,865.85	4,806.32	59.54	81.731		
11,000.00	5,675.00	10,290.00	4,871.54	63.77	172.94	-47.66	332.45	-92.70	4,963.02	4,903.97	59.05	84.046		

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #964H - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 100-MWD+IGRF													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.00	0.00	10,347.00	4,879.63	0.00	174.85	-176.02	-965.21	-67.11	4,993.26					
100.00	100.00	10,347.00	4,879.63	0.29	174.85	-176.02	-965.21	-67.11	4,895.20	4,838.02	57.18	85.610		
200.00	200.00	10,347.00	4,879.63	0.65	174.85	-176.02	-965.21	-67.11	4,797.21	4,739.61	57.60	83.280		
300.00	300.00	10,347.00	4,879.63	1.00	174.85	-176.02	-965.21	-67.11	4,699.31	4,641.25	58.06	80.942		
400.00	399.98	10,347.00	4,879.63	1.35	174.85	-76.31	-965.21	-67.11	4,601.37	4,542.84	58.53	78.611		
500.00	499.84	10,347.00	4,879.63	1.70	174.85	-86.06	-965.21	-67.11	4,503.36	4,444.35	59.02	76.308		
600.00	599.45	10,347.00	4,879.63	2.05	174.85	-95.82	-965.21	-67.11	4,405.39	4,345.89	59.50	74.040		
700.00	698.70	10,338.38	4,879.57	2.41	174.58	-104.61	-965.03	-75.73	4,307.58	4,247.69	59.89	71.923		
800.00	797.47	10,324.38	4,879.47	2.77	174.14	-112.37	-964.74	-89.73	4,210.02	4,149.80	60.22	69.909		
900.00	895.62	10,307.15	4,879.35	3.14	173.60	-119.12	-964.37	-106.95	4,112.83	4,052.32	60.51	67.967		
1,000.00	993.06	10,286.70	4,879.21	3.52	172.96	-124.90	-963.95	-127.39	4,016.12	3,955.36	60.76	66.098		
1,100.00	1,089.87	10,265.87	4,879.06	3.91	172.30	-125.99	-963.51	-148.22	3,919.84	3,858.83	61.01	64.253		
1,200.00	1,186.65	10,245.00	4,878.93	4.30	171.65	-125.38	-963.11	-169.09	3,823.66	3,762.37	61.29	62.388		
1,300.00	1,283.44	10,245.00	4,878.93	4.69	171.65	-125.38	-963.11	-169.09	3,727.60	3,665.77	61.84	60.281		
1,400.00	1,380.22	10,220.90	4,878.85	5.09	170.89	-124.65	-962.69	-193.19	3,631.62	3,569.47	62.15	58.436		
1,500.00	1,477.00	10,207.90	4,878.86	5.49	170.48	-124.24	-962.49	-206.19	3,535.80	3,473.19	62.62	56.466		
1,600.00	1,573.78	10,194.59	4,878.90	5.89	170.06	-123.82	-962.30	-219.49	3,440.14	3,377.01	63.12	54.498		
1,700.00	1,670.56	10,180.96	4,878.98	6.29	169.63	-123.37	-962.12	-233.12	3,344.63	3,280.96	63.67	52.533		
1,800.00	1,767.35	10,150.00	4,879.32	6.69	168.66	-122.32	-961.80	-264.08	3,249.36	3,185.31	64.05	50.735		
1,900.00	1,864.13	10,156.19	4,879.23	7.10	168.86	-122.54	-961.86	-257.89	3,154.11	3,089.20	64.91	48.588		
2,000.00	1,960.91	10,123.27	4,879.65	7.50	167.82	-121.37	-961.62	-290.80	3,059.09	2,993.72	65.36	46.800		
2,100.00	2,057.69	10,091.30	4,879.93	7.90	166.82	-120.17	-961.56	-322.77	2,964.12	2,898.24	65.88	44.992		
2,200.00	2,154.47	10,060.22	4,880.07	8.31	165.84	-118.94	-961.67	-353.85	2,869.22	2,802.75	66.47	43.167		
2,300.00	2,251.26	10,032.96	4,880.11	8.71	164.99	-117.80	-961.87	-381.12	2,774.43	2,707.26	67.17	41.307		
2,400.00	2,348.04	10,006.67	4,880.12	9.12	164.16	-116.65	-962.09	-407.40	2,679.78	2,611.83	67.94	39.441		
2,500.00	2,444.82	9,980.66	4,880.10	9.52	163.35	-115.46	-962.33	-433.41	2,585.29	2,516.49	68.80	37.577		
2,600.00	2,541.62	9,955.00	4,880.04	9.93	162.54	-110.05	-962.58	-459.07	2,490.70	2,420.99	69.71	35.729		
2,699.99	2,638.44	9,930.02	4,879.95	10.33	161.76	-103.05	-962.86	-484.05	2,395.30	2,324.73	70.57	33.940		
2,800.00	2,735.22	9,906.39	4,879.82	10.74	161.02	-101.21	-963.15	-507.68	2,299.46	2,228.02	71.45	32.185		
2,900.00	2,832.01	9,883.11	4,879.66	11.14	160.29	-99.77	-963.45	-530.96	2,203.78	2,131.37	72.41	30.436		
3,000.00	2,928.79	9,865.00	4,879.50	11.54	159.72	-98.60	-963.71	-549.06	2,108.27	2,034.73	73.55	28.666		
3,100.00	3,025.57	9,842.43	4,879.29	11.95	159.02	-97.07	-964.07	-571.62	2,013.00	1,938.25	74.75	26.931		
3,200.00	3,122.35	9,823.75	4,879.12	12.35	158.43	-95.75	-964.41	-590.30	1,918.01	1,841.87	76.14	25.190		
3,300.00	3,219.14	9,805.02	4,878.95	12.76	157.84	-94.38	-964.81	-609.03	1,823.34	1,745.65	77.70	23.467		
3,400.00	3,315.92	9,786.22	4,878.77	13.16	157.26	-92.94	-965.24	-627.82	1,729.06	1,649.62	79.44	21.766		
3,500.00	3,412.70	9,770.00	4,878.62	13.57	156.75	-91.66	-965.66	-644.03	1,635.22	1,553.78	81.44	20.079		
3,600.00	3,509.48	9,750.06	4,878.50	13.97	156.12	-90.03	-966.11	-663.97	1,541.91	1,458.28	83.63	18.438		
3,700.00	3,606.27	9,731.74	4,878.50	14.38	155.55	-88.49	-966.39	-682.28	1,449.23	1,363.11	86.12	16.828		
3,800.00	3,703.05	9,712.61	4,878.60	14.78	154.95	-86.83	-966.54	-701.41	1,357.30	1,268.38	88.93	15.263		
3,900.00	3,799.83	9,692.62	4,878.84	15.19	154.32	-85.05	-966.55	-721.41	1,266.26	1,174.15	92.11	13.748		
4,000.00	3,896.61	9,671.28	4,879.22	15.60	153.65	-83.09	-966.39	-742.74	1,176.27	1,080.56	95.71	12.290		
4,100.00	3,993.40	9,648.07	4,879.66	16.00	152.93	-80.87	-966.20	-765.94	1,087.57	987.73	99.84	10.893		
4,200.00	4,090.18	9,625.18	4,880.04	16.41	152.21	-78.60	-966.06	-788.83	1,000.48	895.82	104.65	9.560		
4,300.00	4,186.96	9,602.60	4,880.38	16.82	151.50	-76.28	-965.97	-811.41	915.46	805.19	110.27	8.302		
4,400.00	4,283.74	9,582.00	4,880.65	17.23	150.85	-74.09	-965.94	-832.01	833.18	716.31	116.87	7.129		
4,500.00	4,380.53	9,559.35	4,880.92	17.63	150.14	-71.62	-965.95	-854.65	754.55	630.09	124.45	6.063		
4,600.00	4,477.31	9,538.34	4,881.16	18.04	149.49	-68.13	-966.02	-875.66	680.85	547.73	133.12	5.115		
4,700.00	4,575.17	9,522.81	4,881.33	18.43	149.00	-42.64	-966.11	-891.19	613.50	470.61	142.88	4.294		
4,800.00	4,674.18	9,517.10	4,881.39	18.77	148.82	0.95	-966.15	-896.90	555.58	402.41	153.17	3.627		
4,900.00	4,773.25	9,521.26	4,881.35	19.07	148.95	44.28	-966.12	-892.74	511.39	349.09	162.31	3.151		
5,000.00	4,871.30	9,535.23	4,881.20	19.33	149.39	64.28	-966.04	-878.78	484.98	317.11	167.87	2.889		
5,080.80	4,949.04	9,553.56	4,880.99	19.53	149.96	70.56	-965.97	-860.45	478.31	309.97	168.35	2.841 CC, ES, SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

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Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #964H - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 100-MWD+IGRF													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	4,967.25	9,558.82	4,880.93	19.57	150.13	71.29	-965.95	-855.18	478.68	310.79	167.89	2.851	
5,200.00	5,060.05	9,591.77	4,880.52	19.79	151.16	71.92	-965.95	-822.24	491.91	329.51	162.39	3.029	
5,300.00	5,148.68	9,633.43	4,879.91	20.00	152.47	68.84	-966.10	-780.58	521.21	367.79	153.42	3.397	
5,400.00	5,232.18	9,686.52	4,878.94	20.19	154.13	63.33	-966.52	-727.50	561.78	418.22	143.56	3.913	
5,500.00	5,309.62	9,774.90	4,878.67	20.38	156.90	55.04	-965.52	-639.14	607.00	472.05	134.95	4.498	
5,600.00	5,380.17	9,840.72	4,879.28	20.57	158.96	49.35	-964.10	-573.33	653.02	525.73	127.29	5.130	
5,700.00	5,443.04	9,914.69	4,879.87	20.77	161.28	44.23	-963.04	-499.37	698.25	576.81	121.44	5.750	
5,799.99	5,497.55	9,994.51	4,880.11	20.98	163.78	40.01	-962.20	-419.56	740.48	623.22	117.26	6.315	
5,900.00	5,547.55	10,075.24	4,880.02	21.24	166.32	37.87	-961.60	-338.83	781.33	667.30	114.04	6.852	
5,999.99	5,597.55	10,150.00	4,879.32	21.54	168.66	36.09	-961.80	-264.08	824.24	713.16	111.08	7.420	
6,100.00	5,639.98	10,250.48	4,878.97	21.86	171.82	32.21	-963.21	-163.61	861.60	751.94	109.66	7.857	
6,200.00	5,666.06	10,346.21	4,879.62	22.21	174.83	30.26	-965.19	-67.90	884.72	774.93	109.79	8.058	
6,299.99	5,675.00	10,347.00	4,879.63	22.54	174.85	29.56	-965.21	-67.11	898.50	789.40	109.11	8.235	
6,400.00	5,675.00	10,347.00	4,879.63	22.90	174.85	29.55	-965.21	-67.11	915.47	807.29	108.18	8.463	
6,500.00	5,675.00	10,347.00	4,879.63	23.32	174.85	29.55	-965.21	-67.11	942.80	836.37	106.43	8.859	
6,600.00	5,675.00	10,347.00	4,879.63	23.78	174.85	29.55	-965.21	-67.11	979.62	875.60	104.01	9.418	
6,700.00	5,675.00	10,347.00	4,879.63	24.29	174.85	29.55	-965.21	-67.11	1,024.90	923.77	101.13	10.134	
6,800.00	5,675.00	10,347.00	4,879.63	24.84	174.85	29.55	-965.21	-67.11	1,077.59	979.62	97.98	10.999	
6,900.00	5,675.00	10,347.00	4,879.63	25.43	174.85	29.55	-965.21	-67.11	1,136.65	1,041.95	94.70	12.002	
7,000.00	5,675.00	10,347.00	4,879.63	26.06	174.85	29.55	-965.21	-67.11	1,201.15	1,109.71	91.44	13.136	
7,100.00	5,675.00	10,347.00	4,879.63	26.72	174.85	29.55	-965.21	-67.11	1,270.25	1,181.98	88.27	14.391	
7,200.00	5,675.00	10,347.00	4,879.63	27.41	174.85	29.55	-965.21	-67.11	1,343.25	1,258.01	85.24	15.758	
7,300.00	5,675.00	10,347.00	4,879.63	28.13	174.85	29.55	-965.21	-67.11	1,419.54	1,337.15	82.39	17.229	
7,400.00	5,675.00	10,347.00	4,879.63	28.88	174.85	29.55	-965.21	-67.11	1,498.62	1,418.89	79.73	18.796	
7,500.00	5,675.00	10,347.00	4,879.63	29.66	174.85	29.55	-965.21	-67.11	1,580.08	1,502.82	77.26	20.451	
7,600.00	5,675.00	10,347.00	4,879.63	30.45	174.85	29.55	-965.21	-67.11	1,663.56	1,588.58	74.98	22.187	
7,700.00	5,675.00	10,347.00	4,879.63	31.27	174.85	29.55	-965.21	-67.11	1,748.77	1,675.89	72.88	23.996	
7,800.00	5,675.00	10,347.00	4,879.63	32.10	174.85	29.55	-965.21	-67.11	1,835.48	1,764.54	70.94	25.874	
7,900.00	5,675.00	10,347.00	4,879.63	32.95	174.85	29.55	-965.21	-67.11	1,923.48	1,854.32	69.16	27.813	
8,000.00	5,675.00	10,347.00	4,879.63	33.82	174.85	29.55	-965.21	-67.11	2,012.59	1,945.08	67.52	29.809	
8,100.00	5,675.00	10,347.00	4,879.63	34.70	174.85	29.55	-965.21	-67.11	2,102.69	2,036.68	66.01	31.856	
8,200.00	5,675.00	10,347.00	4,879.63	35.60	174.85	29.55	-965.21	-67.11	2,193.65	2,129.03	64.62	33.949	
8,300.00	5,675.00	10,347.00	4,879.63	36.51	174.85	29.55	-965.21	-67.11	2,285.36	2,222.03	63.33	36.085	
8,400.00	5,675.00	10,347.00	4,879.63	37.43	174.85	29.55	-965.21	-67.11	2,377.74	2,315.59	62.15	38.259	
8,500.00	5,675.00	10,347.00	4,879.63	38.37	174.85	29.55	-965.21	-67.11	2,470.71	2,409.66	61.05	40.467	
8,600.00	5,675.00	10,347.00	4,879.63	39.31	174.85	29.55	-965.21	-67.11	2,564.22	2,504.17	60.04	42.707	
8,700.00	5,675.00	10,347.00	4,879.63	40.26	174.85	29.55	-965.21	-67.11	2,658.19	2,599.09	59.10	44.974	
8,800.00	5,675.00	10,347.00	4,879.63	41.22	174.85	29.55	-965.21	-67.11	2,752.59	2,694.36	58.24	47.267	
8,900.00	5,675.00	10,347.00	4,879.63	42.19	174.85	29.55	-965.21	-67.11	2,847.37	2,789.94	57.43	49.581	
9,000.00	5,675.00	10,347.00	4,879.63	43.17	174.85	29.55	-965.21	-67.11	2,942.50	2,885.82	56.68	51.915	
9,100.00	5,675.00	10,347.00	4,879.63	44.15	174.85	29.55	-965.21	-67.11	3,037.94	2,981.96	55.98	54.267	
9,200.00	5,675.00	10,347.00	4,879.63	45.14	174.85	29.55	-965.21	-67.11	3,133.67	3,078.33	55.33	56.634	
9,300.00	5,675.00	10,347.00	4,879.63	46.14	174.85	29.55	-965.21	-67.11	3,229.65	3,174.92	54.73	59.014	
9,400.00	5,675.00	10,347.00	4,879.63	47.15	174.85	29.55	-965.21	-67.11	3,325.87	3,271.71	54.16	61.405	
9,500.00	5,675.00	10,347.00	4,879.63	48.15	174.85	29.55	-965.21	-67.11	3,422.31	3,368.67	53.64	63.806	
9,600.00	5,675.00	10,347.00	4,879.63	49.17	174.85	29.55	-965.21	-67.11	3,518.95	3,465.80	53.14	66.216	
9,700.00	5,675.00	10,347.00	4,879.63	50.19	174.85	29.55	-965.21	-67.11	3,615.76	3,563.08	52.68	68.633	
9,800.00	5,675.00	10,347.00	4,879.63	51.21	174.85	29.55	-965.21	-67.11	3,712.75	3,660.50	52.25	71.055	
9,900.00	5,675.00	10,347.00	4,879.63	52.24	174.85	29.55	-965.21	-67.11	3,809.90	3,758.05	51.85	73.481	
10,000.00	5,675.00	10,347.00	4,879.63	53.27	174.85	29.55	-965.21	-67.11	3,907.18	3,855.71	51.47	75.910	
10,100.00	5,675.00	10,347.00	4,879.63	54.31	174.85	29.55	-965.21	-67.11	4,004.61	3,953.49	51.12	78.342	
10,200.00	5,675.00	10,347.00	4,879.63	55.34	174.85	29.55	-965.21	-67.11	4,102.15	4,051.37	50.78	80.775	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design:OCHO_TESORO OFFSETS - BURCH KEELY UNIT #964H - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft	
Survey Program:		100-MWD+IGRF		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:		Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
10,300.00	5,675.00	10,347.00	4,879.63	56.39	174.85	29.55	-965.21	-67.11	4,199.81	4,149.34	50.47	83.208			
10,400.00	5,675.00	10,347.00	4,879.63	57.43	174.85	29.55	-965.21	-67.11	4,297.58	4,247.40	50.18	85.641			
10,500.00	5,675.00	10,347.00	4,879.63	58.48	174.85	29.55	-965.21	-67.11	4,395.45	4,345.54	49.91	88.073			
10,600.00	5,675.00	10,347.00	4,879.63	59.53	174.85	29.55	-965.21	-67.11	4,493.41	4,443.76	49.65	90.503			
10,700.00	5,675.00	10,347.00	4,879.63	60.59	174.85	29.55	-965.21	-67.11	4,591.46	4,542.06	49.41	92.930			
10,800.00	5,675.00	10,347.00	4,879.63	61.64	174.85	29.55	-965.21	-67.11	4,689.60	4,640.42	49.18	95.354			
10,900.00	5,675.00	10,347.00	4,879.63	62.70	174.85	29.55	-965.21	-67.11	4,787.81	4,738.84	48.97	97.775			
11,000.00	5,675.00	10,347.00	4,879.63	63.77	174.85	29.55	-965.21	-67.11	4,886.09	4,837.32	48.77	100.191			
11,100.00	5,675.00	10,347.00	4,879.63	64.83	174.85	29.55	-965.21	-67.11	4,984.44	4,935.86	48.58	102.603			

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #965H - Wellbore #1 - Wellbore #1														Offset Site Error:	0.00 usft
Survey Program: 100-MWD+IGRF		Offset		Semi Major Axis			Offset Wellbore Centre			Rule Assigned: Distance				Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.00	0.00	0.00	0.00	0.00	0.00	-160.61	-1,619.45	-569.83	1,717.15						
100.00	100.00	56.70	56.70	0.29	0.10	-160.61	-1,619.57	-569.86	1,716.91	1,716.52	0.39	4,417.306			
200.00	200.00	149.36	149.36	0.65	0.36	-160.62	-1,620.19	-570.05	1,717.61	1,716.61	1.00	1,713.434			
300.00	300.00	238.98	238.98	1.00	0.68	-160.62	-1,621.09	-570.28	1,718.66	1,716.98	1.68	1,021.020			
400.00	399.98	322.16	322.13	1.35	0.98	-51.75	-1,622.76	-570.50	1,719.55	1,717.22	2.33	737.566			
500.00	499.84	411.86	411.79	1.70	1.30	-51.91	-1,625.43	-570.52	1,719.12	1,716.13	3.00	573.329			
600.00	599.45	524.92	524.81	2.05	1.71	-52.27	-1,628.71	-569.92	1,716.32	1,712.56	3.75	457.222			
700.00	698.70	630.44	630.29	2.41	2.09	-52.75	-1,631.40	-569.08	1,711.04	1,706.55	4.49	381.262			
800.00	797.47	748.82	748.63	2.77	2.52	-53.45	-1,633.53	-567.63	1,702.91	1,697.64	5.27	323.119			
900.00	895.62	859.34	859.15	3.14	2.90	-54.25	-1,634.21	-566.64	1,691.81	1,685.79	6.02	280.818			
1,000.00	993.06	958.22	958.03	3.52	3.25	-55.12	-1,634.44	-565.64	1,678.51	1,671.77	6.74	249.020			
1,100.00	1,089.87	1,053.99	1,053.79	3.91	3.59	-55.91	-1,634.75	-564.52	1,664.02	1,656.57	7.45	223.352			
1,200.00	1,186.65	1,153.11	1,152.90	4.30	3.94	-56.68	-1,635.08	-563.26	1,649.72	1,641.54	8.17	201.814			
1,300.00	1,283.44	1,251.52	1,251.31	4.69	4.28	-57.46	-1,635.15	-562.10	1,635.49	1,626.59	8.90	183.774			
1,400.00	1,380.22	1,349.32	1,349.10	5.09	4.62	-58.23	-1,635.16	-561.14	1,621.54	1,611.92	9.63	168.469			
1,500.00	1,477.00	1,448.24	1,448.02	5.49	4.97	-59.02	-1,634.99	-560.21	1,607.74	1,597.38	10.36	155.253			
1,600.00	1,573.78	1,543.87	1,543.64	5.89	5.30	-59.78	-1,634.67	-559.71	1,594.17	1,583.09	11.07	143.943			
1,700.00	1,670.56	1,641.40	1,641.17	6.29	5.64	-60.57	-1,634.42	-559.44	1,581.03	1,569.23	11.80	133.969			
1,800.00	1,767.35	1,743.74	1,743.51	6.69	5.99	-61.40	-1,633.82	-559.14	1,567.87	1,555.33	12.54	124.996			
1,900.00	1,864.13	1,842.01	1,841.78	7.10	6.32	-62.21	-1,632.99	-559.01	1,554.81	1,541.54	13.27	117.152			
2,000.00	1,960.91	1,939.17	1,938.93	7.50	6.65	-63.00	-1,632.09	-559.26	1,542.04	1,528.04	14.00	110.172			
2,100.00	2,057.69	2,042.68	2,042.44	7.90	7.00	-63.85	-1,630.92	-559.82	1,529.43	1,514.69	14.74	103.740			
2,200.00	2,154.47	2,141.56	2,141.30	8.31	7.34	-64.68	-1,629.24	-560.09	1,516.54	1,501.06	15.48	97.970			
2,300.00	2,251.26	2,232.07	2,231.80	8.71	7.65	-65.46	-1,628.15	-560.18	1,504.43	1,488.24	16.19	92.895			
2,400.00	2,348.04	2,328.72	2,328.45	9.12	7.99	-66.29	-1,626.92	-560.79	1,492.64	1,475.71	16.93	88.166			
2,500.00	2,444.82	2,418.04	2,417.75	9.52	8.29	-67.07	-1,626.17	-561.34	1,481.59	1,463.95	17.64	83.973			
2,600.00	2,541.62	2,517.15	2,516.87	9.93	8.64	-62.36	-1,625.43	-561.83	1,470.20	1,451.81	18.39	79.950			
2,699.99	2,638.44	2,612.03	2,611.74	10.33	8.96	-55.29	-1,624.74	-562.06	1,456.23	1,437.11	19.12	76.166			
2,800.00	2,735.22	2,705.78	2,705.49	10.74	9.29	-55.41	-1,624.23	-562.33	1,440.97	1,421.12	19.84	72.618			
2,900.00	2,832.01	2,803.98	2,803.68	11.14	9.63	-56.21	-1,623.74	-563.05	1,426.03	1,405.45	20.58	69.294			
3,000.00	2,928.79	2,906.21	2,905.91	11.54	9.99	-57.05	-1,622.94	-564.04	1,411.10	1,389.77	21.33	66.157			
3,100.00	3,025.57	2,996.25	2,995.94	11.95	10.30	-57.82	-1,622.31	-564.47	1,396.53	1,374.49	22.05	63.341			
3,200.00	3,122.35	3,089.26	3,088.96	12.35	10.63	-58.64	-1,622.01	-564.57	1,382.65	1,359.87	22.78	60.704			
3,300.00	3,219.14	3,184.74	3,184.43	12.76	10.96	-59.50	-1,621.89	-564.78	1,369.27	1,345.76	23.51	58.233			
3,400.00	3,315.92	3,282.34	3,282.03	13.16	11.30	-60.39	-1,621.79	-565.00	1,356.24	1,331.98	24.26	55.908			
3,500.00	3,412.70	3,378.97	3,378.66	13.57	11.64	-61.29	-1,621.65	-565.18	1,343.51	1,318.51	25.00	53.732			
3,600.00	3,509.48	3,477.07	3,476.76	13.97	11.98	-62.23	-1,621.47	-565.22	1,331.12	1,305.36	25.76	51.680			
3,700.00	3,606.27	3,573.02	3,572.71	14.38	12.32	-63.17	-1,621.24	-565.27	1,319.04	1,292.53	26.51	49.765			
3,800.00	3,703.05	3,669.08	3,668.77	14.78	12.66	-64.12	-1,621.10	-565.31	1,307.42	1,280.16	27.26	47.968			
3,900.00	3,799.83	3,766.81	3,766.50	15.19	13.01	-65.10	-1,620.95	-565.30	1,296.18	1,268.17	28.01	46.270			
4,000.00	3,896.61	3,862.30	3,861.99	15.60	13.34	-66.08	-1,620.75	-565.22	1,285.30	1,256.54	28.76	44.684			
4,100.00	3,993.40	3,962.04	3,961.73	16.00	13.69	-67.12	-1,620.60	-565.13	1,274.89	1,245.36	29.53	43.174			
4,200.00	4,090.18	4,057.13	4,056.82	16.41	14.03	-68.13	-1,620.21	-565.10	1,264.64	1,234.36	30.28	41.765			
4,300.00	4,186.96	4,158.21	4,157.90	16.82	14.38	-69.22	-1,620.01	-565.06	1,255.04	1,223.99	31.05	40.421			
4,400.00	4,283.74	4,254.75	4,254.43	17.23	14.72	-70.26	-1,619.34	-565.41	1,245.30	1,213.50	31.81	39.152			
4,500.00	4,380.53	4,354.25	4,353.94	17.63	15.08	-71.35	-1,618.77	-565.65	1,236.16	1,203.59	32.57	37.949			
4,600.00	4,477.31	4,446.56	4,446.25	18.04	15.44	-72.44	-1,618.19	-565.89	1,227.01	1,194.56	33.33	36.786			
4,700.00	4,575.17	4,544.79	4,544.48	18.43	15.80	-73.53	-1,617.60	-566.13	1,217.86	1,185.41	34.09	35.664			
4,800.00	4,674.18	4,643.86	4,643.55	18.77	16.16	-74.62	-1,617.01	-566.37	1,208.71	1,176.26	34.85	34.582			
4,900.00	4,773.25	4,742.93	4,742.62	19.19	16.52	-75.71	-1,616.42	-566.61	1,199.56	1,167.11	35.61	33.540			
5,000.00	4,871.30	4,841.08	4,840.77	19.63	16.88	-76.80	-1,615.83	-566.85	1,190.41	1,157.96	36.37	32.538			
5,100.00	4,969.45	4,939.23	4,938.92	20.07	17.24	-77.89	-1,615.24	-567.09	1,181.26	1,148.81	37.13	31.576			
5,200.00	5,067.60	5,037.48	5,037.17	20.51	17.60	-78.98	-1,614.65	-567.33	1,172.11	1,139.66	37.89	30.654			
5,300.00	5,165.75	5,135.63	5,135.32	20.95	17.96	-79.97	-1,614.06	-567.57	1,162.96	1,130.51	38.65	29.772			
5,400.00	5,263.90	5,233.81	5,233.50	21.39	18.32	-80.96	-1,613.47	-567.81	1,153.81	1,121.36	39.41	28.930			
5,500.00	5,362.05	5,332.00	5,331.69	21.83	18.68	-81.95	-1,612.88	-568.05	1,144.66	1,112.21	40.17	28.128			
5,600.00	5,460.20	5,430.31	5,430.00	22.27	19.04	-82.94	-1,612.29	-568.29	1,135.51	1,103.06	40.93	27.366			
5,700.00	5,558.35	5,528.62	5,528.31	22.71	19.40	-83.93	-1,611.70	-568.53	1,126.36	1,093.91	41.69	26.644			
5,800.00	5,656.50	5,626.93	5,626.62	23.15	19.76	-84.92	-1,611.11	-568.77	1,117.21	1,084.76	42.45	25.962			
5,900.00	5,754.65	5,725.08	5,724.77	23.59	20.12	-85.91	-1,610.52	-569.01	1,108.06	1,075.61	43.21	25.320			
6,000.00	5,852.80	5,823.31	5,823.00	24.03	20.48	-86.90	-1,609.93	-569.25	1,098.91	1,066.46	43.97	24.718			

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #965H - Wellbore #1 - Wellbore #1													Offset Site Error:
													0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:		Minimum Separation (usft)	Separation Factor	Warning	Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Reference	Offset		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				0.00 usft
5,143.73	5,008.28	5,085.95	4,911.68	19.67	19.88	81.23	-1,575.05	-956.60	1,086.84	1,047.90	38.93	27.914 CC, ES, SF	
5,200.00	5,060.05	5,083.50	4,910.86	19.79	19.85	83.53	-1,575.25	-954.30	1,088.61	1,049.66	38.94	27.953	
5,300.00	5,148.68	5,070.00	4,906.21	20.00	19.63	85.27	-1,576.38	-941.67	1,100.35	1,061.72	38.63	28.484	
5,400.00	5,232.18	5,055.50	4,900.95	20.19	19.42	85.26	-1,577.56	-928.21	1,122.38	1,084.25	38.13	29.438	
5,500.00	5,309.62	5,031.63	4,891.67	20.38	19.09	83.56	-1,579.31	-906.29	1,153.45	1,116.08	37.37	30.862	
5,600.00	5,380.17	5,007.00	4,881.20	20.57	18.76	80.88	-1,580.92	-884.06	1,192.25	1,155.66	36.60	32.577	
5,700.00	5,443.04	4,992.24	4,874.47	20.77	18.58	77.93	-1,581.88	-870.96	1,237.43	1,201.39	36.04	34.335	
5,799.99	5,497.55	4,975.00	4,866.18	20.98	18.37	74.28	-1,583.09	-855.89	1,287.68	1,252.14	35.54	36.228	
5,900.00	5,547.55	4,953.63	4,855.34	21.24	18.14	73.33	-1,584.71	-837.54	1,342.34	1,307.25	35.09	38.253	
5,999.99	5,597.55	4,943.00	4,849.75	21.54	18.02	72.88	-1,585.57	-828.55	1,401.41	1,366.57	34.84	40.224	
6,100.00	5,639.98	4,912.00	4,832.55	21.86	17.72	64.68	-1,588.16	-802.89	1,462.01	1,427.59	34.43	42.469	
6,200.00	5,666.06	4,894.05	4,821.97	22.21	17.56	57.86	-1,589.65	-788.47	1,520.29	1,485.90	34.39	44.212	
6,299.99	5,675.00	4,868.77	4,806.29	22.54	17.35	52.03	-1,591.73	-768.75	1,574.36	1,539.93	34.43	45.726	
6,400.00	5,675.00	4,848.00	4,792.81	22.90	17.19	51.57	-1,593.42	-753.03	1,627.33	1,592.69	34.63	46.987	
6,500.00	5,675.00	4,816.00	4,770.99	23.32	16.97	50.92	-1,595.94	-729.77	1,683.42	1,648.69	34.73	48.466	
6,600.00	5,675.00	4,797.13	4,757.51	23.78	16.85	50.53	-1,597.35	-716.65	1,742.54	1,707.54	34.99	49.798	
6,700.00	5,675.00	4,785.00	4,748.60	24.29	16.77	50.27	-1,598.22	-708.46	1,804.54	1,769.22	35.31	51.100	
6,800.00	5,675.00	4,753.00	4,724.27	24.84	16.60	49.57	-1,600.41	-687.79	1,869.07	1,833.63	35.44	52.739	
6,900.00	5,675.00	4,740.47	4,714.44	25.43	16.54	49.29	-1,601.24	-680.07	1,936.03	1,900.28	35.74	54.164	
7,000.00	5,675.00	4,721.00	4,698.87	26.06	16.44	48.85	-1,602.48	-668.45	2,005.22	1,969.25	35.97	55.742	
7,100.00	5,675.00	4,708.59	4,688.75	26.72	16.38	48.56	-1,603.24	-661.31	2,076.47	2,040.22	36.25	57.284	
7,200.00	5,675.00	4,690.00	4,673.28	27.41	16.30	48.13	-1,604.34	-651.06	2,149.67	2,113.21	36.46	58.960	
7,300.00	5,675.00	4,690.00	4,673.28	28.13	16.30	48.13	-1,604.34	-651.06	2,224.65	2,187.86	36.79	60.466	
7,400.00	5,675.00	4,672.08	4,658.04	28.88	16.22	47.71	-1,605.35	-641.69	2,301.19	2,264.22	36.98	62.232	
7,500.00	5,675.00	4,658.00	4,645.84	29.66	16.16	47.38	-1,606.11	-634.70	2,379.31	2,342.13	37.18	64.000	
7,600.00	5,675.00	4,658.00	4,645.84	30.45	16.16	47.38	-1,606.11	-634.70	2,458.82	2,421.37	37.45	65.658	
7,700.00	5,675.00	4,643.05	4,632.69	31.27	16.11	47.03	-1,606.92	-627.63	2,539.55	2,501.94	37.61	67.518	
7,800.00	5,675.00	4,626.00	4,617.47	32.10	16.04	46.62	-1,607.87	-620.01	2,621.56	2,583.81	37.75	69.437	
7,900.00	5,675.00	4,626.00	4,617.47	32.95	16.04	46.62	-1,607.87	-620.01	2,704.50	2,666.53	37.98	71.211	
8,000.00	5,675.00	4,626.00	4,617.47	33.82	16.04	46.62	-1,607.87	-620.01	2,788.57	2,750.38	38.19	73.025	
8,100.00	5,675.00	4,626.00	4,617.47	34.70	16.04	46.62	-1,607.87	-620.01	2,873.65	2,835.27	38.38	74.875	
8,200.00	5,675.00	4,595.00	4,589.20	35.60	15.92	45.89	-1,609.73	-607.44	2,959.42	2,921.00	38.41	77.041	
8,300.00	5,675.00	4,595.00	4,589.20	36.51	15.92	45.89	-1,609.73	-607.44	3,045.88	3,007.29	38.59	78.934	
8,400.00	5,675.00	4,595.00	4,589.20	37.43	15.92	45.89	-1,609.73	-607.44	3,133.15	3,094.40	38.75	80.856	
8,500.00	5,675.00	4,595.00	4,589.20	38.37	15.92	45.89	-1,609.73	-607.44	3,221.16	3,182.26	38.90	82.802	
8,600.00	5,675.00	4,595.00	4,589.20	39.31	15.92	45.89	-1,609.73	-607.44	3,309.85	3,270.80	39.04	84.771	
8,700.00	5,675.00	4,578.98	4,574.31	40.26	15.86	45.52	-1,610.73	-601.61	3,398.91	3,359.79	39.12	86.894	
8,800.00	5,675.00	4,563.00	4,559.29	41.22	15.81	45.14	-1,611.69	-596.25	3,488.74	3,449.56	39.19	89.032	
8,900.00	5,675.00	4,563.00	4,559.29	42.19	15.81	45.14	-1,611.69	-596.25	3,578.87	3,539.56	39.31	91.044	
9,000.00	5,675.00	4,563.00	4,559.29	43.17	15.81	45.14	-1,611.69	-596.25	3,669.51	3,630.09	39.43	93.071	
9,100.00	5,675.00	4,563.00	4,559.29	44.15	15.81	45.14	-1,611.69	-596.25	3,760.63	3,721.09	39.54	95.112	
9,200.00	5,675.00	4,563.00	4,559.29	45.14	15.81	45.14	-1,611.69	-596.25	3,852.18	3,812.54	39.65	97.166	
9,300.00	5,675.00	4,563.00	4,559.29	46.14	15.81	45.14	-1,611.69	-596.25	3,944.15	3,904.40	39.75	99.232	
9,400.00	5,675.00	4,563.00	4,559.29	47.15	15.81	45.14	-1,611.69	-596.25	4,036.50	3,996.65	39.84	101.307	
9,500.00	5,675.00	4,545.80	4,542.94	48.15	15.75	44.74	-1,612.67	-590.99	4,128.89	4,089.01	39.88	103.522	
9,600.00	5,675.00	4,531.00	4,528.74	49.17	15.69	44.39	-1,613.49	-586.90	4,221.94	4,182.01	39.93	105.735	
9,700.00	5,675.00	4,531.00	4,528.74	50.19	15.69	44.39	-1,613.49	-586.90	4,315.08	4,275.06	40.02	107.827	
9,800.00	5,675.00	4,531.00	4,528.74	51.21	15.69	44.39	-1,613.49	-586.90	4,408.52	4,368.42	40.10	109.926	
9,900.00	5,675.00	4,531.00	4,528.74	52.24	15.69	44.39	-1,613.49	-586.90	4,502.24	4,462.05	40.19	112.031	
10,000.00	5,675.00	4,531.00	4,528.74	53.27	15.69	44.39	-1,613.49	-586.90	4,596.23	4,555.96	40.27	114.140	
10,100.00	5,675.00	4,531.00	4,528.74	54.31	15.69	44.39	-1,613.49	-586.90	4,690.46	4,650.12	40.35	116.254	
10,200.00	5,675.00	4,531.00	4,528.74	55.34	15.69	44.39	-1,613.49	-586.90	4,784.93	4,744.51	40.42	118.371	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design:OCHO_TESORO OFFSETS - BURCH KEELY UNIT #965H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program:		100-MWD+IGRF						Rule Assigned:				Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Reference (usft)	Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,300.00	5,675.00	4,531.00	4,528.74	56.39	15.69	44.39	-1,613.49	-586.90	4,879.62	4,839.12	40.50	120.491	
10,400.00	5,675.00	4,531.00	4,528.74	57.43	15.69	44.39	-1,613.49	-586.90	4,974.52	4,933.95	40.57	122.614	

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #966H - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 25-MWD+IGRF													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
500.00	499.84	9,581.00	4,889.74	1.70	151.20	-71.19	-2,286.72	-296.34	4,973.16	4,893.20	79.96	62.193	
600.00	599.45	9,581.00	4,889.74	2.05	151.20	-75.11	-2,286.72	-296.34	4,883.28	4,802.23	81.06	60.244	
700.00	698.70	9,581.00	4,889.74	2.41	151.20	-79.11	-2,286.72	-296.34	4,793.41	4,711.23	82.18	58.327	
800.00	797.47	9,581.00	4,889.74	2.77	151.20	-83.13	-2,286.72	-296.34	4,703.65	4,620.32	83.33	56.447	
900.00	895.62	9,581.00	4,889.74	3.14	151.20	-87.14	-2,286.72	-296.34	4,614.12	4,529.62	84.50	54.604	
1,000.00	993.06	9,581.00	4,889.74	3.52	151.20	-91.08	-2,286.72	-296.34	4,524.95	4,439.25	85.70	52.802	
1,100.00	1,089.87	9,581.00	4,889.74	3.91	151.20	-92.19	-2,286.72	-296.34	4,436.25	4,349.32	86.92	51.036	
1,200.00	1,186.65	9,581.00	4,889.74	4.30	151.20	-92.19	-2,286.72	-296.34	4,348.04	4,259.83	88.20	49.295	
1,300.00	1,283.44	9,581.00	4,889.74	4.69	151.20	-92.19	-2,286.72	-296.34	4,260.35	4,170.81	89.54	47.580	
1,400.00	1,380.22	9,581.00	4,889.74	5.09	151.20	-92.19	-2,286.72	-296.34	4,173.22	4,082.28	90.94	45.891	
1,500.00	1,477.00	9,581.00	4,889.74	5.49	151.20	-92.19	-2,286.72	-296.34	4,086.67	3,994.28	92.39	44.232	
1,600.00	1,573.78	9,581.00	4,889.74	5.89	151.20	-92.19	-2,286.72	-296.34	4,000.75	3,906.85	93.91	42.603	
1,700.00	1,670.56	9,581.00	4,889.74	6.29	151.20	-92.19	-2,286.72	-296.34	3,915.51	3,820.02	95.48	41.007	
1,800.00	1,767.35	9,581.00	4,889.74	6.69	151.20	-92.19	-2,286.72	-296.34	3,830.97	3,733.84	97.13	39.443	
1,900.00	1,864.13	9,559.95	4,889.56	7.10	150.54	-91.66	-2,286.76	-317.39	3,747.14	3,648.73	98.40	38.079	
2,000.00	1,960.91	9,536.97	4,889.36	7.50	149.82	-91.08	-2,286.80	-340.37	3,663.97	3,564.28	99.70	36.751	
2,100.00	2,057.69	9,513.99	4,889.16	7.90	149.10	-90.49	-2,286.84	-363.34	3,581.52	3,480.48	101.04	35.445	
2,200.00	2,154.47	9,491.02	4,888.96	8.31	148.38	-89.90	-2,286.88	-386.32	3,499.83	3,397.39	102.45	34.163	
2,300.00	2,251.26	9,470.18	4,888.78	8.71	147.73	-89.36	-2,286.91	-407.15	3,418.97	3,315.02	103.95	32.889	
2,400.00	2,348.04	9,448.96	4,888.62	9.12	147.06	-88.81	-2,286.95	-428.38	3,339.00	3,233.49	105.51	31.646	
2,500.00	2,444.82	9,422.20	4,888.41	9.52	146.22	-88.11	-2,287.00	-455.13	3,259.97	3,152.97	107.00	30.466	
2,600.00	2,541.62	9,396.22	4,888.17	9.93	145.41	-81.62	-2,287.04	-481.11	3,181.38	3,072.83	108.55	29.307	
2,699.99	2,638.44	9,372.22	4,887.91	10.33	144.66	-72.74	-2,287.09	-505.11	3,101.78	2,991.65	110.13	28.165	
2,800.00	2,735.22	9,358.00	4,887.74	10.74	144.21	-71.66	-2,287.11	-519.33	3,022.01	2,910.06	111.94	26.996	
2,900.00	2,832.01	9,337.07	4,887.52	11.14	143.56	-71.04	-2,287.15	-540.26	2,943.34	2,829.68	113.66	25.897	
3,000.00	2,928.79	9,321.44	4,887.39	11.54	143.07	-70.58	-2,287.17	-555.89	2,865.89	2,750.33	115.57	24.799	
3,100.00	3,025.57	9,305.46	4,887.30	11.95	142.57	-70.11	-2,287.20	-571.86	2,789.77	2,672.24	117.53	23.737	
3,200.00	3,122.35	9,299.00	4,887.28	12.35	142.37	-69.92	-2,287.21	-578.33	2,715.10	2,595.29	119.81	22.662	
3,300.00	3,219.14	9,278.10	4,887.26	12.76	141.71	-69.29	-2,287.27	-599.23	2,641.96	2,520.19	121.77	21.696	
3,400.00	3,315.92	9,264.52	4,887.30	13.16	141.29	-68.89	-2,287.33	-612.81	2,570.54	2,446.55	123.99	20.732	
3,500.00	3,412.70	9,250.51	4,887.39	13.57	140.85	-68.47	-2,287.41	-626.81	2,500.96	2,374.72	126.24	19.811	
3,600.00	3,509.48	9,236.06	4,887.53	13.97	140.40	-68.03	-2,287.51	-641.27	2,433.37	2,304.84	128.53	18.933	
3,700.00	3,606.27	9,221.13	4,887.73	14.38	139.93	-67.58	-2,287.63	-656.19	2,367.94	2,237.11	130.83	18.099	
3,800.00	3,703.05	9,207.45	4,887.96	14.78	139.50	-67.17	-2,287.76	-669.87	2,304.84	2,171.65	133.19	17.305	
3,900.00	3,799.83	9,176.65	4,888.45	15.19	138.54	-66.23	-2,288.09	-700.66	2,244.20	2,109.15	135.05	16.617	
4,000.00	3,896.61	9,147.80	4,888.70	15.60	137.64	-65.35	-2,288.41	-729.51	2,186.16	2,049.21	136.95	15.963	
4,100.00	3,993.40	9,120.73	4,888.73	16.00	136.79	-64.52	-2,288.73	-756.58	2,130.94	1,992.09	138.85	15.347	
4,200.00	4,090.18	9,096.48	4,888.63	16.41	136.03	-63.77	-2,289.02	-780.83	2,078.81	1,938.05	140.75	14.769	
4,300.00	4,186.96	9,073.40	4,888.53	16.82	135.31	-63.05	-2,289.26	-803.90	2,030.03	1,887.43	142.59	14.237	
4,400.00	4,283.74	9,050.11	4,888.47	17.23	134.58	-62.33	-2,289.46	-827.20	1,984.84	1,840.56	144.28	13.757	
4,500.00	4,380.53	9,026.58	4,888.44	17.63	133.85	-61.59	-2,289.63	-850.72	1,943.51	1,797.72	145.78	13.332	
4,600.00	4,477.31	9,014.00	4,888.44	18.04	133.45	-60.30	-2,289.70	-863.31	1,906.29	1,758.87	147.42	12.931	
4,700.00	4,575.17	8,993.86	4,888.47	18.43	132.83	-59.36	-2,289.83	-883.44	1,873.50	1,724.95	148.54	12.612	
4,800.00	4,674.18	8,989.61	4,888.48	18.77	132.69	1.13	-2,289.86	-887.70	1,845.86	1,696.02	149.84	12.319	
4,900.00	4,773.25	8,993.80	4,888.47	19.07	132.82	43.21	-2,289.83	-883.51	1,823.96	1,672.95	151.01	12.079	
5,000.00	4,871.30	9,014.00	4,888.44	19.33	133.45	63.54	-2,289.70	-863.31	1,808.20	1,655.93	152.27	11.875	
5,100.00	4,967.25	9,034.01	4,888.45	19.57	134.08	72.87	-2,289.58	-843.30	1,798.62	1,645.53	153.10	11.748	
5,200.00	5,060.05	9,075.96	4,888.54	19.79	135.39	76.95	-2,289.23	-801.35	1,794.92	1,640.69	154.23	11.638	
5,218.31	5,076.62	9,084.90	4,888.58	19.83	135.67	77.38	-2,289.14	-792.40	1,794.84	1,640.40	154.44	11.622 CC, ES	
5,300.00	5,148.68	9,124.99	4,888.74	20.00	136.92	78.60	-2,288.68	-752.32	1,796.49	1,641.27	155.22	11.574	
5,400.00	5,232.18	9,173.89	4,888.48	20.19	138.45	79.00	-2,288.12	-703.43	1,802.79	1,646.89	155.90	11.564 SF	
5,500.00	5,309.62	9,230.11	4,887.60	20.38	140.21	78.43	-2,287.55	-647.22	1,813.12	1,656.55	156.58	11.580	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT #966H - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 25-MWD+IGRF													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,600.00	5,380.17	9,296.65	4,887.27	20.57	142.29	77.19	-2,287.22	-580.68	1,826.48	1,669.01	157.47	11.599	
5,700.00	5,443.04	9,378.51	4,887.98	20.77	144.86	75.48	-2,287.07	-498.82	1,841.56	1,682.72	158.84	11.594	
5,799.99	5,497.55	9,460.70	4,888.71	20.98	147.43	73.77	-2,286.93	-416.63	1,857.32	1,697.05	160.27	11.589	
5,900.00	5,547.55	9,548.53	4,889.46	21.24	150.18	72.48	-2,286.78	-328.81	1,873.68	1,711.78	161.90	11.573	
5,999.99	5,597.55	9,581.00	4,889.74	21.54	151.20	72.01	-2,286.72	-296.34	1,891.96	1,730.29	161.67	11.702	
6,100.00	5,639.98	9,581.00	4,889.74	21.86	151.20	70.06	-2,286.72	-296.34	1,912.39	1,752.07	160.31	11.929	
6,200.00	5,666.06	9,581.00	4,889.74	22.21	151.20	68.19	-2,286.72	-296.34	1,932.00	1,772.94	159.06	12.146	
6,299.99	5,675.00	9,581.00	4,889.74	22.54	151.20	66.48	-2,286.72	-296.34	1,950.24	1,792.30	157.94	12.348	
6,400.00	5,675.00	9,581.00	4,889.74	22.90	151.20	66.46	-2,286.72	-296.34	1,970.00	1,813.23	156.77	12.566	
6,500.00	5,675.00	9,581.00	4,889.74	23.32	151.20	66.46	-2,286.72	-296.34	1,994.57	1,839.24	155.34	12.840	
6,600.00	5,675.00	9,581.00	4,889.74	23.78	151.20	66.46	-2,286.72	-296.34	2,023.80	1,870.13	153.67	13.170	
6,700.00	5,675.00	9,581.00	4,889.74	24.29	151.20	66.46	-2,286.72	-296.34	2,057.47	1,905.67	151.80	13.554	
6,800.00	5,675.00	9,581.00	4,889.74	24.84	151.20	66.46	-2,286.72	-296.34	2,095.38	1,945.62	149.76	13.992	
6,900.00	5,675.00	9,581.00	4,889.74	25.43	151.20	66.46	-2,286.72	-296.34	2,137.30	1,989.73	147.57	14.483	
7,000.00	5,675.00	9,581.00	4,889.74	26.06	151.20	66.46	-2,286.72	-296.34	2,183.00	2,037.72	145.27	15.027	
7,100.00	5,675.00	9,581.00	4,889.74	26.72	151.20	66.46	-2,286.72	-296.34	2,232.24	2,089.35	142.89	15.622	
7,200.00	5,675.00	9,581.00	4,889.74	27.41	151.20	66.46	-2,286.72	-296.34	2,284.81	2,144.36	140.45	16.268	
7,300.00	5,675.00	9,581.00	4,889.74	28.13	151.20	66.46	-2,286.72	-296.34	2,340.47	2,202.49	137.98	16.963	
7,400.00	5,675.00	9,581.00	4,889.74	28.88	151.20	66.46	-2,286.72	-296.34	2,399.00	2,263.51	135.49	17.706	
7,500.00	5,675.00	9,581.00	4,889.74	29.66	151.20	66.46	-2,286.72	-296.34	2,460.21	2,327.20	133.01	18.496	
7,600.00	5,675.00	9,581.00	4,889.74	30.45	151.20	66.46	-2,286.72	-296.34	2,523.90	2,393.35	130.55	19.333	
7,700.00	5,675.00	9,581.00	4,889.74	31.27	151.20	66.46	-2,286.72	-296.34	2,589.88	2,461.76	128.12	20.214	
7,800.00	5,675.00	9,581.00	4,889.74	32.10	151.20	66.46	-2,286.72	-296.34	2,657.99	2,532.26	125.74	21.140	
7,900.00	5,675.00	9,581.00	4,889.74	32.95	151.20	66.46	-2,286.72	-296.34	2,728.07	2,604.67	123.40	22.107	
8,000.00	5,675.00	9,581.00	4,889.74	33.82	151.20	66.46	-2,286.72	-296.34	2,799.96	2,678.84	121.12	23.116	
8,100.00	5,675.00	9,581.00	4,889.74	34.70	151.20	66.46	-2,286.72	-296.34	2,873.54	2,754.63	118.91	24.166	
8,200.00	5,675.00	9,581.00	4,889.74	35.60	151.20	66.46	-2,286.72	-296.34	2,948.67	2,831.91	116.76	25.254	
8,300.00	5,675.00	9,581.00	4,889.74	36.51	151.20	66.46	-2,286.72	-296.34	3,025.24	2,910.57	114.67	26.381	
8,400.00	5,675.00	9,581.00	4,889.74	37.43	151.20	66.46	-2,286.72	-296.34	3,103.15	2,990.49	112.66	27.545	
8,500.00	5,675.00	9,581.00	4,889.74	38.37	151.20	66.46	-2,286.72	-296.34	3,182.29	3,071.58	110.71	28.744	
8,600.00	5,675.00	9,581.00	4,889.74	39.31	151.20	66.46	-2,286.72	-296.34	3,262.57	3,153.74	108.83	29.978	
8,700.00	5,675.00	9,581.00	4,889.74	40.26	151.20	66.46	-2,286.72	-296.34	3,343.92	3,236.90	107.02	31.245	
8,800.00	5,675.00	9,581.00	4,889.74	41.22	151.20	66.46	-2,286.72	-296.34	3,426.26	3,320.98	105.28	32.546	
8,900.00	5,675.00	9,581.00	4,889.74	42.19	151.20	66.46	-2,286.72	-296.34	3,509.51	3,405.92	103.60	33.877	
9,000.00	5,675.00	9,581.00	4,889.74	43.17	151.20	66.46	-2,286.72	-296.34	3,593.62	3,491.64	101.98	35.239	
9,100.00	5,675.00	9,581.00	4,889.74	44.15	151.20	66.46	-2,286.72	-296.34	3,678.53	3,578.10	100.42	36.631	
9,200.00	5,675.00	9,581.00	4,889.74	45.14	151.20	66.46	-2,286.72	-296.34	3,764.17	3,665.25	98.92	38.052	
9,300.00	5,675.00	9,581.00	4,889.74	46.14	151.20	66.46	-2,286.72	-296.34	3,850.51	3,753.03	97.48	39.499	
9,400.00	5,675.00	9,581.00	4,889.74	47.15	151.20	66.46	-2,286.72	-296.34	3,937.49	3,841.39	96.10	40.974	
9,500.00	5,675.00	9,581.00	4,889.74	48.15	151.20	66.46	-2,286.72	-296.34	4,025.08	3,930.32	94.77	42.474	
9,600.00	5,675.00	9,581.00	4,889.74	49.17	151.20	66.46	-2,286.72	-296.34	4,113.24	4,019.75	93.48	43.999	
9,700.00	5,675.00	9,581.00	4,889.74	50.19	151.20	66.46	-2,286.72	-296.34	4,201.92	4,109.67	92.25	45.548	
9,800.00	5,675.00	9,581.00	4,889.74	51.21	151.20	66.46	-2,286.72	-296.34	4,291.10	4,200.04	91.07	47.120	
9,900.00	5,675.00	9,581.00	4,889.74	52.24	151.20	66.46	-2,286.72	-296.34	4,380.75	4,290.83	89.93	48.715	
10,000.00	5,675.00	9,581.00	4,889.74	53.27	151.20	66.46	-2,286.72	-296.34	4,470.84	4,382.01	88.83	50.331	
10,100.00	5,675.00	9,581.00	4,889.74	54.31	151.20	66.46	-2,286.72	-296.34	4,561.34	4,473.57	87.77	51.967	
10,200.00	5,675.00	9,581.00	4,889.74	55.34	151.20	66.46	-2,286.72	-296.34	4,652.24	4,565.48	86.76	53.623	
10,300.00	5,675.00	9,581.00	4,889.74	56.39	151.20	66.46	-2,286.72	-296.34	4,743.49	4,657.71	85.78	55.298	
10,400.00	5,675.00	9,581.00	4,889.74	57.43	151.20	66.46	-2,286.72	-296.34	4,835.10	4,750.26	84.84	56.991	
10,500.00	5,675.00	9,581.00	4,889.74	58.48	151.20	66.46	-2,286.72	-296.34	4,927.03	4,843.09	83.93	58.702	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT 19 FEDERAL #196H - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 4280-MWD+IGRF													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
800.00	797.47	9,232.00	4,776.94	2.77	143.39	-77.27	-2,895.90	-432.84	4,957.24	4,866.24	90.99	54.479	
900.00	895.62	9,232.00	4,776.94	3.14	143.39	-80.34	-2,895.90	-432.84	4,873.02	4,780.75	92.27	52.811	
1,000.00	993.06	9,232.00	4,776.94	3.52	143.39	-83.39	-2,895.90	-432.84	4,789.09	4,695.51	93.57	51.179	
1,100.00	1,089.87	9,232.00	4,776.94	3.91	143.39	-84.27	-2,895.90	-432.84	4,705.60	4,610.70	94.90	49.583	
1,200.00	1,186.65	9,232.00	4,776.94	4.30	143.39	-84.27	-2,895.90	-432.84	4,622.77	4,526.49	96.28	48.015	
1,300.00	1,283.44	9,232.00	4,776.94	4.69	143.39	-84.27	-2,895.90	-432.84	4,540.62	4,442.92	97.70	46.475	
1,400.00	1,380.22	9,232.00	4,776.94	5.09	143.39	-84.27	-2,895.90	-432.84	4,459.20	4,360.03	99.17	44.964	
1,500.00	1,477.00	9,232.00	4,776.94	5.49	143.39	-84.27	-2,895.90	-432.84	4,378.56	4,277.87	100.69	43.485	
1,600.00	1,573.78	9,232.00	4,776.94	5.89	143.39	-84.27	-2,895.90	-432.84	4,298.72	4,196.46	102.26	42.037	
1,700.00	1,670.56	9,232.00	4,776.94	6.29	143.39	-84.27	-2,895.90	-432.84	4,219.75	4,115.87	103.88	40.622	
1,800.00	1,767.35	9,232.00	4,776.94	6.69	143.39	-84.27	-2,895.90	-432.84	4,141.69	4,036.14	105.54	39.242	
1,900.00	1,864.13	9,232.00	4,776.94	7.10	143.39	-84.27	-2,895.90	-432.84	4,064.58	3,957.33	107.26	37.896	
2,000.00	1,960.91	9,232.00	4,776.94	7.50	143.39	-84.27	-2,895.90	-432.84	3,988.49	3,879.48	109.02	36.586	
2,100.00	2,057.69	9,232.00	4,776.94	7.90	143.39	-84.27	-2,895.90	-432.84	3,913.48	3,802.66	110.82	35.313	
2,200.00	2,154.47	9,232.00	4,776.94	8.31	143.39	-84.27	-2,895.90	-432.84	3,839.61	3,726.94	112.68	34.077	
2,300.00	2,251.26	9,232.00	4,776.94	8.71	143.39	-84.27	-2,895.90	-432.84	3,766.95	3,652.37	114.57	32.878	
2,400.00	2,348.04	9,232.00	4,776.94	9.12	143.39	-84.27	-2,895.90	-432.84	3,695.56	3,579.05	116.51	31.718	
2,500.00	2,444.82	9,232.00	4,776.94	9.52	143.39	-84.27	-2,895.90	-432.84	3,625.52	3,507.03	118.49	30.597	
2,600.00	2,541.62	9,232.00	4,776.94	9.93	143.39	-78.48	-2,895.90	-432.84	3,556.29	3,435.79	120.50	29.513	
2,699.99	2,638.44	9,209.43	4,777.37	10.33	142.68	-69.80	-2,895.79	-455.40	3,486.10	3,364.18	121.92	28.594	
2,800.00	2,735.22	9,186.59	4,777.81	10.74	141.96	-68.63	-2,895.67	-478.24	3,415.79	3,292.48	123.32	27.699	
2,900.00	2,832.01	9,166.58	4,778.19	11.14	141.33	-68.19	-2,895.57	-498.24	3,346.85	3,222.04	124.81	26.816	
3,000.00	2,928.79	9,150.70	4,778.50	11.54	140.83	-67.84	-2,895.52	-514.12	3,279.38	3,152.96	126.43	25.939	
3,100.00	3,025.57	9,130.31	4,778.89	11.95	140.19	-67.38	-2,895.51	-534.51	3,213.49	3,085.55	127.94	25.117	
3,200.00	3,122.35	9,102.89	4,779.43	12.35	139.32	-66.76	-2,895.46	-561.92	3,149.22	3,019.94	129.28	24.360	
3,300.00	3,219.14	9,075.43	4,779.98	12.76	138.46	-66.15	-2,895.35	-589.38	3,086.64	2,956.03	130.61	23.632	
3,400.00	3,315.92	9,047.91	4,780.55	13.16	137.59	-65.52	-2,895.19	-616.89	3,025.86	2,893.93	131.93	22.935	
3,500.00	3,412.70	9,022.91	4,781.07	13.57	136.80	-64.96	-2,895.01	-641.88	2,967.01	2,833.70	133.31	22.256	
3,600.00	3,509.48	8,998.20	4,781.57	13.97	136.03	-64.39	-2,894.83	-666.59	2,910.20	2,775.53	134.67	21.609	
3,700.00	3,606.27	8,973.60	4,782.06	14.38	135.25	-63.83	-2,894.63	-691.18	2,855.58	2,719.57	136.01	20.996	
3,800.00	3,703.05	8,951.00	4,782.50	14.78	134.54	-63.32	-2,894.43	-713.78	2,803.25	2,665.90	137.36	20.409	
3,900.00	3,799.83	8,927.33	4,782.96	15.19	133.79	-62.77	-2,894.23	-737.44	2,753.38	2,614.76	138.62	19.863	
4,000.00	3,896.61	8,905.21	4,783.41	15.60	133.10	-62.26	-2,894.03	-759.56	2,706.09	2,566.23	139.86	19.348	
4,100.00	3,993.40	8,882.94	4,783.89	16.00	132.40	-61.75	-2,893.84	-781.83	2,661.54	2,520.52	141.02	18.874	
4,200.00	4,090.18	8,860.51	4,784.38	16.41	131.69	-61.23	-2,893.64	-804.25	2,619.84	2,477.77	142.07	18.440	
4,300.00	4,186.96	8,837.72	4,784.90	16.82	130.97	-60.70	-2,893.45	-827.03	2,581.15	2,438.15	143.00	18.050	
4,400.00	4,283.74	8,814.79	4,785.44	17.23	130.25	-60.17	-2,893.25	-849.96	2,545.59	2,401.80	143.80	17.703	
4,500.00	4,380.53	8,791.77	4,785.98	17.63	129.53	-59.64	-2,893.05	-872.96	2,513.30	2,368.85	144.45	17.399	
4,600.00	4,477.31	8,768.70	4,786.54	18.04	128.80	-58.24	-2,892.84	-896.03	2,484.40	2,339.46	144.94	17.141	
4,700.00	4,575.17	8,761.00	4,786.72	18.43	128.56	-38.27	-2,892.78	-903.72	2,459.26	2,313.53	145.73	16.876	
4,800.00	4,674.18	8,761.00	4,786.72	18.77	128.56	1.63	-2,892.78	-903.72	2,438.50	2,291.97	146.53	16.641	
4,900.00	4,773.25	8,761.00	4,786.72	19.07	128.56	43.47	-2,892.78	-903.72	2,422.48	2,275.39	147.09	16.470	
5,000.00	4,871.30	8,761.00	4,786.72	19.33	128.56	64.14	-2,892.78	-903.72	2,411.46	2,264.07	147.39	16.361	
5,100.00	4,967.25	8,784.86	4,786.15	19.57	129.31	73.31	-2,892.98	-879.88	2,405.52	2,257.32	148.21	16.231	
5,173.27	5,035.60	8,808.82	4,785.58	19.74	130.06	76.84	-2,893.19	-855.92	2,404.27	2,255.40	148.87	16.151 CC	
5,200.00	5,060.05	8,818.89	4,785.34	19.79	130.38	77.72	-2,893.28	-845.86	2,404.43	2,255.31	149.12	16.124 ES	
5,300.00	5,148.68	8,862.73	4,784.33	20.00	131.76	79.72	-2,893.66	-802.02	2,407.78	2,257.63	150.15	16.036	
5,400.00	5,232.18	8,916.29	4,783.18	20.19	133.45	80.29	-2,894.13	-748.48	2,415.00	2,263.68	151.32	15.960	
5,500.00	5,309.62	8,979.33	4,781.94	20.38	135.43	79.94	-2,894.67	-685.45	2,425.38	2,272.71	152.67	15.886	
5,600.00	5,380.17	9,052.00	4,780.46	20.57	137.72	78.99	-2,895.22	-612.81	2,438.11	2,283.86	154.26	15.806	
5,700.00	5,443.04	9,145.77	4,778.59	20.77	140.67	77.52	-2,895.51	-519.05	2,452.11	2,295.63	156.48	15.671	
5,799.99	5,497.55	9,215.19	4,777.26	20.98	142.86	76.32	-2,895.82	-449.65	2,466.94	2,308.94	158.00	15.613 SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH KEELY UNIT 19 FEDERAL #196H - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 4280-MWD+IGRF													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,900.00	5,547.55	9,232.00	4,776.94	21.24	143.39	76.12	-2,895.90	-432.84	2,483.43	2,325.52	157.91	15.727		
5,999.99	5,597.55	9,232.00	4,776.94	21.54	143.39	76.12	-2,895.90	-432.84	2,503.74	2,346.60	157.14	15.933		
6,100.00	5,639.98	9,232.00	4,776.94	21.86	143.39	73.96	-2,895.90	-432.84	2,525.79	2,369.47	156.32	16.158		
6,200.00	5,666.06	9,232.00	4,776.94	22.21	143.39	71.90	-2,895.90	-432.84	2,546.90	2,391.32	155.58	16.370		
6,299.99	5,675.00	9,232.00	4,776.94	22.54	143.39	70.01	-2,895.90	-432.84	2,566.46	2,411.53	154.94	16.565		
6,400.00	5,675.00	9,232.00	4,776.94	22.90	143.39	69.99	-2,895.90	-432.84	2,586.86	2,432.58	154.28	16.767		
6,500.00	5,675.00	9,232.00	4,776.94	23.32	143.39	69.99	-2,895.90	-432.84	2,610.93	2,457.43	153.50	17.010		
6,600.00	5,675.00	9,232.00	4,776.94	23.78	143.39	69.99	-2,895.90	-432.84	2,638.57	2,485.99	152.58	17.293		
6,700.00	5,675.00	9,232.00	4,776.94	24.29	143.39	69.99	-2,895.90	-432.84	2,669.67	2,518.13	151.55	17.616		
6,800.00	5,675.00	9,232.00	4,776.94	24.84	143.39	69.99	-2,895.90	-432.84	2,704.12	2,553.72	150.40	17.979		
6,900.00	5,675.00	9,232.00	4,776.94	25.43	143.39	69.99	-2,895.90	-432.84	2,741.78	2,592.62	149.16	18.381		
7,000.00	5,675.00	9,232.00	4,776.94	26.06	143.39	69.99	-2,895.90	-432.84	2,782.53	2,634.69	147.84	18.822		
7,100.00	5,675.00	9,232.00	4,776.94	26.72	143.39	69.99	-2,895.90	-432.84	2,826.23	2,679.80	146.43	19.301		
7,200.00	5,675.00	9,232.00	4,776.94	27.41	143.39	69.99	-2,895.90	-432.84	2,872.75	2,727.78	144.96	19.817		
7,300.00	5,675.00	9,232.00	4,776.94	28.13	143.39	69.99	-2,895.90	-432.84	2,921.95	2,778.51	143.44	20.370		
7,400.00	5,675.00	9,232.00	4,776.94	28.88	143.39	69.99	-2,895.90	-432.84	2,973.70	2,831.82	141.88	20.960		
7,500.00	5,675.00	9,232.00	4,776.94	29.66	143.39	69.99	-2,895.90	-432.84	3,027.87	2,887.59	140.28	21.584		
7,600.00	5,675.00	9,232.00	4,776.94	30.45	143.39	69.99	-2,895.90	-432.84	3,084.33	2,945.67	138.66	22.244		
7,700.00	5,675.00	9,232.00	4,776.94	31.27	143.39	69.99	-2,895.90	-432.84	3,142.96	3,005.94	137.02	22.938		
7,800.00	5,675.00	9,232.00	4,776.94	32.10	143.39	69.99	-2,895.90	-432.84	3,203.64	3,068.27	135.38	23.665		
7,900.00	5,675.00	9,232.00	4,776.94	32.95	143.39	69.99	-2,895.90	-432.84	3,266.25	3,132.53	133.73	24.425		
8,000.00	5,675.00	9,232.00	4,776.94	33.82	143.39	69.99	-2,895.90	-432.84	3,330.69	3,198.61	132.09	25.216		
8,100.00	5,675.00	9,232.00	4,776.94	34.70	143.39	69.99	-2,895.90	-432.84	3,396.86	3,266.40	130.45	26.039		
8,200.00	5,675.00	9,232.00	4,776.94	35.60	143.39	69.99	-2,895.90	-432.84	3,464.64	3,335.80	128.84	26.892		
8,300.00	5,675.00	9,232.00	4,776.94	36.51	143.39	69.99	-2,895.90	-432.84	3,533.95	3,406.72	127.24	27.775		
8,400.00	5,675.00	9,232.00	4,776.94	37.43	143.39	69.99	-2,895.90	-432.84	3,604.71	3,479.05	125.66	28.687		
8,500.00	5,675.00	9,232.00	4,776.94	38.37	143.39	69.99	-2,895.90	-432.84	3,676.83	3,552.72	124.11	29.627		
8,600.00	5,675.00	9,232.00	4,776.94	39.31	143.39	69.99	-2,895.90	-432.84	3,750.22	3,627.64	122.58	30.594		
8,700.00	5,675.00	9,232.00	4,776.94	40.26	143.39	69.99	-2,895.90	-432.84	3,824.82	3,703.74	121.08	31.589		
8,800.00	5,675.00	9,232.00	4,776.94	41.22	143.39	69.99	-2,895.90	-432.84	3,900.56	3,780.94	119.61	32.610		
8,900.00	5,675.00	9,232.00	4,776.94	42.19	143.39	69.99	-2,895.90	-432.84	3,977.37	3,859.19	118.18	33.656		
9,000.00	5,675.00	9,232.00	4,776.94	43.17	143.39	69.99	-2,895.90	-432.84	4,055.19	3,938.42	116.77	34.727		
9,100.00	5,675.00	9,232.00	4,776.94	44.15	143.39	69.99	-2,895.90	-432.84	4,133.97	4,018.56	115.40	35.822		
9,200.00	5,675.00	9,232.00	4,776.94	45.14	143.39	69.99	-2,895.90	-432.84	4,213.64	4,099.58	114.06	36.942		
9,300.00	5,675.00	9,232.00	4,776.94	46.14	143.39	69.99	-2,895.90	-432.84	4,294.17	4,181.41	112.76	38.084		
9,400.00	5,675.00	9,232.00	4,776.94	47.15	143.39	69.99	-2,895.90	-432.84	4,375.50	4,264.02	111.48	39.248		
9,500.00	5,675.00	9,232.00	4,776.94	48.15	143.39	69.99	-2,895.90	-432.84	4,457.59	4,347.35	110.24	40.434		
9,600.00	5,675.00	9,232.00	4,776.94	49.17	143.39	69.99	-2,895.90	-432.84	4,540.40	4,431.36	109.03	41.642		
9,700.00	5,675.00	9,232.00	4,776.94	50.19	143.39	69.99	-2,895.90	-432.84	4,623.88	4,516.03	107.86	42.870		
9,800.00	5,675.00	9,232.00	4,776.94	51.21	143.39	69.99	-2,895.90	-432.84	4,708.01	4,601.30	106.71	44.119		
9,900.00	5,675.00	9,232.00	4,776.94	52.24	143.39	69.99	-2,895.90	-432.84	4,792.76	4,687.16	105.60	45.387		
10,000.00	5,675.00	9,232.00	4,776.94	53.27	143.39	69.99	-2,895.90	-432.84	4,878.07	4,773.56	104.51	46.674		
10,100.00	5,675.00	9,232.00	4,776.94	54.31	143.39	69.99	-2,895.90	-432.84	4,963.94	4,860.48	103.46	47.979		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH-FEDERAL A #10 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 300-UNKNOWN													Offset Well Error:
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)		
0.00	0.00	0.00	0.00	0.00	0.00	-121.72	-258.56	-418.39	492.42				
100.00	100.00	76.00	76.00	0.29	1.49	-121.72	-258.56	-418.39	491.84	490.06	1.78	276.089	
200.00	200.00	176.00	176.00	0.65	3.46	-121.72	-258.56	-418.39	491.84	487.73	4.11	119.768	
300.00	300.00	276.00	276.00	1.00	5.43	-121.72	-258.56	-418.39	491.84	485.41	6.43	76.470	
400.00	399.98	375.98	375.98	1.35	8.94	-12.87	-258.56	-418.39	490.14	479.84	10.29	47.624	
500.00	499.84	475.84	475.84	1.70	12.93	-13.03	-258.56	-418.39	485.03	470.40	14.63	33.144	
600.00	599.45	575.45	575.45	2.05	16.92	-13.30	-258.56	-418.39	476.55	457.57	18.97	25.118	
700.00	698.70	674.70	674.70	2.41	20.89	-13.71	-258.56	-418.39	464.69	441.39	23.30	19.945	
800.00	797.47	773.47	773.47	2.77	24.84	-14.25	-258.56	-418.39	449.50	421.90	27.61	16.283	
900.00	895.62	871.62	871.62	3.14	28.76	-14.97	-258.56	-418.39	431.02	399.13	31.89	13.517	
1,000.00	993.06	969.06	969.06	3.52	32.66	-15.91	-258.56	-418.39	409.30	373.15	36.14	11.325	
1,100.00	1,089.87	1,065.87	1,065.87	3.91	36.53	-16.97	-258.56	-418.39	385.23	344.87	40.37	9.543	
1,200.00	1,186.65	1,162.65	1,162.65	4.30	40.41	-18.13	-258.56	-418.39	361.17	316.59	44.58	8.101	
1,300.00	1,283.44	1,259.44	1,259.44	4.69	44.28	-19.45	-258.56	-418.39	337.27	288.46	48.81	6.910	
1,400.00	1,380.22	1,356.22	1,356.22	5.09	48.15	-20.98	-258.56	-418.39	313.56	260.53	53.03	5.913	
1,500.00	1,477.00	1,453.00	1,453.00	5.49	52.02	-22.75	-258.56	-418.39	290.10	232.84	57.26	5.066	
1,600.00	1,573.78	1,549.78	1,549.78	5.89	55.89	-24.83	-258.56	-418.39	266.95	205.46	61.49	4.341	
1,700.00	1,670.56	1,646.56	1,646.56	6.29	59.76	-27.29	-258.56	-418.39	244.20	178.47	65.73	3.715	
1,800.00	1,767.35	1,743.35	1,743.35	6.69	63.63	-30.25	-258.56	-418.39	221.97	151.99	69.98	3.172	
1,900.00	1,864.13	1,840.13	1,840.13	7.10	67.51	-33.84	-258.56	-418.39	200.44	126.20	74.23	2.700	
2,000.00	1,960.91	1,936.91	1,936.91	7.50	71.38	-38.25	-258.56	-418.39	179.85	101.34	78.51	2.291	
2,100.00	2,057.69	2,033.69	2,033.69	7.90	75.25	-43.73	-258.56	-418.39	160.57	77.77	82.80	1.939	
2,200.00	2,154.47	2,130.47	2,130.47	8.31	79.12	-50.58	-258.56	-418.39	143.13	56.01	87.12	1.643	
2,300.00	2,251.26	2,227.26	2,227.26	8.71	82.99	-59.09	-258.56	-418.39	128.28	36.81	91.47	1.402 Level 3	
2,400.00	2,348.04	2,324.04	2,324.04	9.12	86.86	-69.42	-258.56	-418.39	117.02	21.17	95.85	1.221 Level 2	
2,500.00	2,444.82	2,420.82	2,420.82	9.52	90.73	-81.35	-258.56	-418.39	110.44	10.22	100.22	1.102 Level 2	
2,600.00	2,541.62	2,517.62	2,517.62	9.93	94.60	-88.55	-258.56	-418.39	108.50	3.97	104.53	1.038 Level 2	
2,628.80	2,569.51	2,545.51	2,545.51	10.04	95.72	-90.00	-258.56	-418.39	108.41	2.65	105.76	1.025 Level 2, CC	
2,699.99	2,638.44	2,614.44	2,614.44	10.33	98.48	-93.61	-258.56	-418.39	108.99	0.22	108.77	1.002 Level 2, ES, SF	
2,800.00	2,735.22	2,711.22	2,711.22	10.74	102.35	-105.42	-258.56	-418.39	113.18	0.26	112.92	1.002 Level 2	
2,900.00	2,832.01	2,808.01	2,808.01	11.14	106.22	-116.54	-258.56	-418.39	122.49	5.46	117.02	1.047 Level 2	
3,000.00	2,928.79	2,904.79	2,904.79	11.54	110.09	-125.88	-258.56	-418.39	135.88	14.76	121.12	1.122 Level 2	
3,100.00	3,025.57	3,001.57	3,001.57	11.95	113.96	-133.44	-258.56	-418.39	152.28	27.04	125.24	1.216 Level 2	
3,200.00	3,122.35	3,098.35	3,098.35	12.35	117.83	-139.50	-258.56	-418.39	170.83	41.45	129.38	1.320 Level 3	
3,300.00	3,219.14	3,195.14	3,195.14	12.76	121.71	-144.35	-258.56	-418.39	190.90	57.36	133.53	1.430 Level 3	
3,400.00	3,315.92	3,242.00	3,242.00	13.16	123.58	-146.36	-258.56	-418.39	217.85	86.14	131.71	1.654	
3,500.00	3,412.70	3,242.00	3,242.00	13.57	123.58	-146.36	-258.56	-418.39	276.19	161.65	114.53	2.411	
3,600.00	3,509.48	3,242.00	3,242.00	13.97	123.58	-146.36	-258.56	-418.39	353.70	255.50	98.19	3.602	
3,700.00	3,606.27	3,242.00	3,242.00	14.38	123.58	-146.36	-258.56	-418.39	440.37	354.17	86.20	5.109	
3,800.00	3,703.05	3,242.00	3,242.00	14.78	123.58	-146.36	-258.56	-418.39	531.74	454.08	77.66	6.847	
3,900.00	3,799.83	3,242.00	3,242.00	15.19	123.58	-146.36	-258.56	-418.39	625.75	554.28	71.47	8.756	
4,000.00	3,896.61	3,242.00	3,242.00	15.60	123.58	-146.36	-258.56	-418.39	721.38	654.53	66.85	10.791	
4,100.00	3,993.40	3,242.00	3,242.00	16.00	123.58	-146.36	-258.56	-418.39	818.05	754.74	63.31	12.921	
4,200.00	4,090.18	3,242.00	3,242.00	16.41	123.58	-146.36	-258.56	-418.39	915.44	854.90	60.54	15.121	
4,300.00	4,186.96	3,242.00	3,242.00	16.82	123.58	-146.36	-258.56	-418.39	1,013.33	955.00	58.33	17.372	
4,400.00	4,283.74	3,242.00	3,242.00	17.23	123.58	-146.36	-258.56	-418.39	1,111.61	1,055.07	56.54	19.661	
4,500.00	4,380.53	3,242.00	3,242.00	17.63	123.58	-146.36	-258.56	-418.39	1,210.16	1,155.10	55.06	21.978	
4,600.00	4,477.31	3,242.00	3,242.00	18.04	123.58	-145.77	-258.56	-418.39	1,308.93	1,255.10	53.83	24.314	
4,700.00	4,575.17	3,242.00	3,242.00	18.43	123.58	-129.08	-258.56	-418.39	1,406.85	1,354.52	52.33	26.884	
4,800.00	4,674.18	3,242.00	3,242.00	18.77	123.58	-91.13	-258.56	-418.39	1,502.64	1,452.37	50.27	29.889	
4,900.00	4,773.25	3,242.00	3,242.00	19.07	123.58	-50.63	-258.56	-418.39	1,595.74	1,547.95	47.79	33.393	
5,000.00	4,871.30	3,242.00	3,242.00	19.33	123.58	-30.86	-258.56	-418.39	1,685.64	1,640.68	44.96	37.491	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH-FEDERAL A #10 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 300-UNKNOWN													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	4,967.25	3,242.00	3,242.00	19.57	123.58	-21.66	-258.56	-418.39	1,771.93	1,730.05	41.89	42.304	
5,200.00	5,060.05	3,242.00	3,242.00	19.79	123.58	-16.66	-258.56	-418.39	1,854.23	1,815.59	38.64	47.987	
5,300.00	5,148.68	3,242.00	3,242.00	20.00	123.58	-13.61	-258.56	-418.39	1,932.19	1,896.88	35.31	54.716	
5,400.00	5,232.18	3,242.00	3,242.00	20.19	123.58	-11.60	-258.56	-418.39	2,005.53	1,973.52	32.01	62.647	
5,500.00	5,309.62	3,242.00	3,242.00	20.38	123.58	-10.19	-258.56	-418.39	2,073.97	2,045.08	28.89	71.793	
5,600.00	5,380.17	3,242.00	3,242.00	20.57	123.58	-9.18	-258.56	-418.39	2,137.26	2,111.10	26.16	81.701	
5,700.00	5,443.04	3,242.00	3,242.00	20.77	123.58	-8.43	-258.56	-418.39	2,195.18	2,171.02	24.16	90.854	
5,799.99	5,497.55	3,242.00	3,242.00	20.98	123.58	-7.88	-258.56	-418.39	2,247.53	2,224.21	23.33	96.345	
5,900.00	5,547.55	3,242.00	3,242.00	21.24	123.58	-7.87	-258.56	-418.39	2,298.58	2,274.60	23.98	95.851	
5,999.99	5,597.55	3,242.00	3,242.00	21.54	123.58	-7.87	-258.56	-418.39	2,352.76	2,326.86	25.90	90.851	
6,100.00	5,639.98	3,242.00	3,242.00	21.86	123.58	-7.12	-258.56	-418.39	2,402.80	2,374.00	28.80	83.437	
6,200.00	5,666.06	3,242.00	3,242.00	22.21	123.58	-6.63	-258.56	-418.39	2,440.66	2,408.07	32.59	74.897	
6,299.99	5,675.00	3,242.00	3,242.00	22.54	123.58	-6.34	-258.56	-418.39	2,465.77	2,428.78	37.00	66.649	
6,400.00	5,675.00	3,242.00	3,242.00	22.90	123.58	-6.34	-258.56	-418.39	2,486.09	2,444.38	41.72	59.596	
6,500.00	5,675.00	3,242.00	3,242.00	23.32	123.58	-6.34	-258.56	-418.39	2,510.23	2,463.74	46.50	53.988	
6,600.00	5,675.00	3,242.00	3,242.00	23.78	123.58	-6.34	-258.56	-418.39	2,538.08	2,486.83	51.25	49.523	
6,700.00	5,675.00	3,242.00	3,242.00	24.29	123.58	-6.34	-258.56	-418.39	2,569.53	2,513.60	55.93	45.946	
6,800.00	5,675.00	3,242.00	3,242.00	24.84	123.58	-6.34	-258.56	-418.39	2,604.43	2,543.95	60.48	43.062	
6,900.00	5,675.00	3,242.00	3,242.00	25.43	123.58	-6.34	-258.56	-418.39	2,642.66	2,577.77	64.89	40.723	
7,000.00	5,675.00	3,242.00	3,242.00	26.06	123.58	-6.34	-258.56	-418.39	2,684.08	2,614.94	69.14	38.820	
7,100.00	5,675.00	3,242.00	3,242.00	26.72	123.58	-6.34	-258.56	-418.39	2,728.53	2,655.31	73.21	37.267	
7,200.00	5,675.00	3,242.00	3,242.00	27.41	123.58	-6.34	-258.56	-418.39	2,775.87	2,698.77	77.11	36.001	
7,300.00	5,675.00	3,242.00	3,242.00	28.13	123.58	-6.34	-258.56	-418.39	2,825.96	2,745.15	80.81	34.970	
7,400.00	5,675.00	3,242.00	3,242.00	28.88	123.58	-6.34	-258.56	-418.39	2,878.66	2,794.33	84.33	34.135	
7,500.00	5,675.00	3,242.00	3,242.00	29.66	123.58	-6.34	-258.56	-418.39	2,933.82	2,846.15	87.67	33.465	
7,600.00	5,675.00	3,242.00	3,242.00	30.45	123.58	-6.34	-258.56	-418.39	2,991.30	2,900.48	90.82	32.935	
7,700.00	5,675.00	3,242.00	3,242.00	31.27	123.58	-6.34	-258.56	-418.39	3,050.98	2,957.17	93.81	32.525	
7,800.00	5,675.00	3,242.00	3,242.00	32.10	123.58	-6.34	-258.56	-418.39	3,112.73	3,016.11	96.62	32.217	
7,900.00	5,675.00	3,242.00	3,242.00	32.95	123.58	-6.34	-258.56	-418.39	3,176.42	3,077.15	99.27	31.997	
8,000.00	5,675.00	3,242.00	3,242.00	33.82	123.58	-6.34	-258.56	-418.39	3,241.96	3,140.19	101.77	31.856	
8,100.00	5,675.00	3,242.00	3,242.00	34.70	123.58	-6.34	-258.56	-418.39	3,309.21	3,205.09	104.12	31.782	
8,200.00	5,675.00	3,242.00	3,242.00	35.60	123.58	-6.34	-258.56	-418.39	3,378.09	3,271.75	106.34	31.768	
8,300.00	5,675.00	3,242.00	3,242.00	36.51	123.58	-6.34	-258.56	-418.39	3,448.49	3,340.07	108.42	31.807	
8,400.00	5,675.00	3,242.00	3,242.00	37.43	123.58	-6.34	-258.56	-418.39	3,520.32	3,409.94	110.38	31.893	
8,500.00	5,675.00	3,242.00	3,242.00	38.37	123.58	-6.34	-258.56	-418.39	3,593.50	3,481.28	112.23	32.020	
8,600.00	5,675.00	3,242.00	3,242.00	39.31	123.58	-6.34	-258.56	-418.39	3,667.95	3,553.99	113.96	32.186	
8,700.00	5,675.00	3,242.00	3,242.00	40.26	123.58	-6.34	-258.56	-418.39	3,743.59	3,627.99	115.60	32.385	
8,800.00	5,675.00	3,242.00	3,242.00	41.22	123.58	-6.34	-258.56	-418.39	3,820.35	3,703.21	117.14	32.614	
8,900.00	5,675.00	3,242.00	3,242.00	42.19	123.58	-6.34	-258.56	-418.39	3,898.16	3,779.57	118.59	32.871	
9,000.00	5,675.00	3,242.00	3,242.00	43.17	123.58	-6.34	-258.56	-418.39	3,976.97	3,857.01	119.96	33.153	
9,100.00	5,675.00	3,242.00	3,242.00	44.15	123.58	-6.34	-258.56	-418.39	4,056.71	3,935.46	121.25	33.458	
9,200.00	5,675.00	3,242.00	3,242.00	45.14	123.58	-6.34	-258.56	-418.39	4,137.33	4,014.86	122.46	33.784	
9,300.00	5,675.00	3,242.00	3,242.00	46.14	123.58	-6.34	-258.56	-418.39	4,218.78	4,095.16	123.61	34.129	
9,400.00	5,675.00	3,242.00	3,242.00	47.15	123.58	-6.34	-258.56	-418.39	4,301.01	4,176.31	124.70	34.491	
9,500.00	5,675.00	3,242.00	3,242.00	48.15	123.58	-6.34	-258.56	-418.39	4,383.98	4,258.25	125.73	34.869	
9,600.00	5,675.00	3,242.00	3,242.00	49.17	123.58	-6.34	-258.56	-418.39	4,467.65	4,340.95	126.70	35.261	
9,700.00	5,675.00	3,242.00	3,242.00	50.19	123.58	-6.34	-258.56	-418.39	4,551.98	4,424.35	127.62	35.668	
9,800.00	5,675.00	3,242.00	3,242.00	51.21	123.58	-6.34	-258.56	-418.39	4,636.93	4,508.43	128.49	36.086	
9,900.00	5,675.00	3,242.00	3,242.00	52.24	123.58	-6.34	-258.56	-418.39	4,722.47	4,593.14	129.32	36.517	
10,000.00	5,675.00	3,242.00	3,242.00	53.27	123.58	-6.34	-258.56	-418.39	4,808.56	4,678.45	130.11	36.958	
10,100.00	5,675.00	3,242.00	3,242.00	54.31	123.58	-6.34	-258.56	-418.39	4,895.19	4,764.33	130.86	37.409	
10,200.00	5,675.00	3,242.00	3,242.00	55.34	123.58	-6.34	-258.56	-418.39	4,982.32	4,850.75	131.57	37.869	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH-FEDERAL A #11 - Wellbore #1 - Wellbore #1														Offset Site Error:	0.00 usft
Survey Program: 300-UNKNOWN														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning		
							+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
0.00	0.00	0.00	0.00	0.00	0.00	-169.80	-2,232.60	-401.63	2,268.62						
100.00	100.00	71.00	71.00	0.29	1.42	-169.80	-2,232.60	-401.63	2,268.44	2,266.73	1.71	1,328.957			
200.00	200.00	171.00	171.00	0.65	3.42	-169.80	-2,232.60	-401.63	2,268.44	2,264.37	4.07	557.995			
300.00	300.00	271.00	271.00	1.00	5.42	-169.80	-2,232.60	-401.63	2,268.44	2,262.01	6.42	353.133			
400.00	399.98	370.98	370.98	1.35	8.84	-60.96	-2,232.60	-401.63	2,267.59	2,257.40	10.19	222.502			
500.00	499.84	470.84	470.84	1.70	12.83	-61.12	-2,232.60	-401.63	2,265.05	2,250.52	14.53	155.870			
600.00	599.45	570.45	570.45	2.05	16.82	-61.38	-2,232.60	-401.63	2,260.85	2,241.98	18.87	119.819			
700.00	698.70	669.70	669.70	2.41	20.79	-61.76	-2,232.60	-401.63	2,255.01	2,231.82	23.20	97.215			
800.00	797.47	768.47	768.47	2.77	24.74	-62.23	-2,232.60	-401.63	2,247.59	2,220.09	27.51	81.705			
900.00	895.62	866.62	866.62	3.14	28.66	-62.82	-2,232.60	-401.63	2,238.66	2,206.86	31.80	70.395			
1,000.00	993.06	964.06	964.06	3.52	32.56	-63.51	-2,232.60	-401.63	2,228.30	2,192.22	36.07	61.774			
1,100.00	1,089.87	1,060.87	1,060.87	3.91	36.43	-64.13	-2,232.60	-401.63	2,216.97	2,176.65	40.32	54.982			
1,200.00	1,186.65	1,157.65	1,157.65	4.30	40.31	-64.71	-2,232.60	-401.63	2,205.82	2,161.24	44.57	49.487			
1,300.00	1,283.44	1,254.44	1,254.44	4.69	44.18	-65.28	-2,232.60	-401.63	2,194.89	2,146.06	48.83	44.951			
1,400.00	1,380.22	1,351.22	1,351.22	5.09	48.05	-65.87	-2,232.60	-401.63	2,184.20	2,131.11	53.09	41.143			
1,500.00	1,477.00	1,448.00	1,448.00	5.49	51.92	-66.46	-2,232.60	-401.63	2,173.75	2,116.40	57.35	37.904			
1,600.00	1,573.78	1,544.78	1,544.78	5.89	55.79	-67.05	-2,232.60	-401.63	2,163.54	2,101.93	61.61	35.116			
1,700.00	1,670.56	1,641.56	1,641.56	6.29	59.66	-67.65	-2,232.60	-401.63	2,153.58	2,087.70	65.88	32.691			
1,800.00	1,767.35	1,738.35	1,738.35	6.69	63.53	-68.25	-2,232.60	-401.63	2,143.86	2,073.72	70.14	30.564			
1,900.00	1,864.13	1,835.13	1,835.13	7.10	67.41	-68.86	-2,232.60	-401.63	2,134.40	2,059.99	74.41	28.684			
2,000.00	1,960.91	1,931.91	1,931.91	7.50	71.28	-69.48	-2,232.60	-401.63	2,125.20	2,046.51	78.68	27.010			
2,100.00	2,057.69	2,028.69	2,028.69	7.90	75.15	-70.10	-2,232.60	-401.63	2,116.25	2,033.30	82.95	25.512			
2,200.00	2,154.47	2,125.47	2,125.47	8.31	79.02	-70.72	-2,232.60	-401.63	2,107.57	2,020.34	87.23	24.162			
2,300.00	2,251.26	2,222.26	2,222.26	8.71	82.89	-71.35	-2,232.60	-401.63	2,099.15	2,007.65	91.50	22.942			
2,400.00	2,348.04	2,319.04	2,319.04	9.12	86.76	-71.99	-2,232.60	-401.63	2,091.00	1,995.22	95.77	21.833			
2,500.00	2,444.82	2,415.82	2,415.82	9.52	90.63	-72.63	-2,232.60	-401.63	2,083.12	1,983.07	100.05	20.821			
2,600.00	2,541.62	2,512.62	2,512.62	9.93	94.50	-67.72	-2,232.60	-401.63	2,074.71	1,970.38	104.32	19.887			
2,699.99	2,638.44	2,609.44	2,609.44	10.33	98.38	-60.51	-2,232.60	-401.63	2,063.51	1,954.91	108.60	19.001			
2,800.00	2,735.22	2,706.22	2,706.22	10.74	102.25	-60.47	-2,232.60	-401.63	2,050.69	1,937.83	112.87	18.169			
2,900.00	2,832.01	2,803.01	2,803.01	11.14	106.12	-61.07	-2,232.60	-401.63	2,038.10	1,920.96	117.14	17.399			
3,000.00	2,928.79	2,899.79	2,899.79	11.54	109.99	-61.68	-2,232.60	-401.63	2,025.74	1,904.34	121.41	16.686			
3,100.00	3,025.57	2,996.57	2,996.57	11.95	113.86	-62.30	-2,232.60	-401.63	2,013.62	1,887.94	125.68	16.022			
3,200.00	3,122.35	3,093.35	3,093.35	12.35	117.73	-62.92	-2,232.60	-401.63	2,001.74	1,871.79	129.95	15.404			
3,300.00	3,219.14	3,190.14	3,190.14	12.76	121.61	-63.55	-2,232.60	-401.63	1,990.11	1,855.89	134.22	14.827			
3,400.00	3,315.92	3,286.92	3,286.92	13.16	125.48	-64.02	-2,232.60	-401.63	1,978.89	1,841.40	137.49	14.393			
3,500.00	3,412.70	3,383.70	3,383.70	13.57	129.35	-64.02	-2,232.60	-401.63	1,971.37	1,833.70	137.67	14.319			
3,598.52	3,508.05	3,479.05	3,479.05	13.97	133.22	-64.02	-2,232.60	-401.63	1,968.91	1,831.38	137.53	14.317	CC, ES, SF		
3,600.00	3,509.48	3,480.48	3,480.48	13.97	133.22	-64.02	-2,232.60	-401.63	1,968.91	1,831.39	137.52	14.317			
3,700.00	3,606.27	3,577.27	3,577.27	14.38	137.09	-64.02	-2,232.60	-401.63	1,971.52	1,834.48	137.04	14.387			
3,800.00	3,703.05	3,674.05	3,674.05	14.78	140.96	-64.02	-2,232.60	-401.63	1,979.19	1,842.96	136.23	14.529			
3,900.00	3,799.83	3,770.83	3,770.83	15.19	144.83	-64.02	-2,232.60	-401.63	1,991.85	1,856.75	135.11	14.743			
4,000.00	3,896.61	3,867.61	3,867.61	15.60	148.70	-64.02	-2,232.60	-401.63	2,009.42	1,875.73	133.70	15.030			
4,100.00	3,993.40	3,964.40	3,964.40	16.00	152.57	-64.02	-2,232.60	-401.63	2,031.77	1,899.74	132.02	15.389			
4,200.00	4,090.18	4,061.18	4,061.18	16.41	156.44	-64.02	-2,232.60	-401.63	2,058.73	1,928.61	130.12	15.822			
4,300.00	4,186.96	4,157.96	4,157.96	16.82	160.31	-64.02	-2,232.60	-401.63	2,090.14	1,962.12	128.01	16.327			
4,400.00	4,283.74	4,254.74	4,254.74	17.23	164.18	-64.02	-2,232.60	-401.63	2,125.79	2,000.04	125.75	16.905			
4,500.00	4,380.53	4,351.53	4,351.53	17.63	168.05	-64.02	-2,232.60	-401.63	2,165.47	2,042.12	123.35	17.556			
4,600.00	4,477.31	4,448.31	4,448.31	18.04	171.92	-63.46	-2,232.60	-401.63	2,208.97	2,088.12	120.85	18.279			
4,700.00	4,575.17	4,546.17	4,546.17	18.43	175.79	-48.38	-2,232.60	-401.63	2,255.64	2,137.42	118.22	19.081			
4,800.00	4,674.18	4,645.18	4,645.18	18.77	179.66	-13.08	-2,232.60	-401.63	2,304.60	2,189.17	115.43	19.966			
4,900.00	4,773.25	4,744.25	4,744.25	19.07	183.53	24.35	-2,232.60	-401.63	2,355.18	2,242.65	112.54	20.928			
5,000.00	4,871.30	4,842.30	4,842.30	19.33	187.40	40.87	-2,232.60	-401.63	2,406.76	2,297.16	109.60	21.959			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH-FEDERAL A #11 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 300-UNKNOWN													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning	
							+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,100.00	4,967.25	3,262.00	3,262.00	19.57	124.48	46.79	-2,232.60	-401.63	2,458.72	2,352.04	106.69	23.046		
5,200.00	5,060.05	3,262.00	3,262.00	19.79	124.48	48.55	-2,232.60	-401.63	2,510.49	2,406.64	103.85	24.175		
5,300.00	5,148.68	3,262.00	3,262.00	20.00	124.48	48.48	-2,232.60	-401.63	2,561.52	2,460.38	101.14	25.325		
5,400.00	5,232.18	3,262.00	3,262.00	20.19	124.48	47.54	-2,232.60	-401.63	2,611.32	2,512.69	98.63	26.475		
5,500.00	5,309.62	3,262.00	3,262.00	20.38	124.48	46.20	-2,232.60	-401.63	2,659.42	2,563.05	96.37	27.595		
5,600.00	5,380.17	3,262.00	3,262.00	20.57	124.48	44.69	-2,232.60	-401.63	2,705.41	2,611.00	94.42	28.654		
5,700.00	5,443.04	3,262.00	3,262.00	20.77	124.48	43.15	-2,232.60	-401.63	2,748.90	2,656.08	92.81	29.618		
5,799.99	5,497.55	3,262.00	3,262.00	20.98	124.48	41.66	-2,232.60	-401.63	2,789.53	2,697.92	91.61	30.451		
5,900.00	5,547.55	3,262.00	3,262.00	21.24	124.48	41.64	-2,232.60	-401.63	2,830.05	2,739.33	90.71	31.198		
5,999.99	5,597.55	3,262.00	3,262.00	21.54	124.48	41.64	-2,232.60	-401.63	2,873.46	2,783.47	89.99	31.930		
6,100.00	5,639.98	3,262.00	3,262.00	21.86	124.48	38.83	-2,232.60	-401.63	2,913.88	2,824.27	89.61	32.517		
6,200.00	5,666.06	3,262.00	3,262.00	22.21	124.48	36.84	-2,232.60	-401.63	2,944.61	2,854.82	89.79	32.793		
6,299.99	5,675.00	3,262.00	3,262.00	22.54	124.48	35.61	-2,232.60	-401.63	2,965.02	2,874.48	90.54	32.748		
6,400.00	5,675.00	3,262.00	3,262.00	22.90	124.48	35.60	-2,232.60	-401.63	2,981.58	2,889.93	91.65	32.531		
6,500.00	5,675.00	3,262.00	3,262.00	23.32	124.48	35.60	-2,232.60	-401.63	3,001.38	2,908.46	92.92	32.301		
6,600.00	5,675.00	3,262.00	3,262.00	23.78	124.48	35.60	-2,232.60	-401.63	3,024.36	2,930.05	94.31	32.067		
6,700.00	5,675.00	3,262.00	3,262.00	24.29	124.48	35.60	-2,232.60	-401.63	3,050.44	2,954.63	95.82	31.835		
6,800.00	5,675.00	3,262.00	3,262.00	24.84	124.48	35.60	-2,232.60	-401.63	3,079.56	2,982.14	97.41	31.614		
6,900.00	5,675.00	3,262.00	3,262.00	25.43	124.48	35.60	-2,232.60	-401.63	3,111.61	3,012.54	99.07	31.407		
7,000.00	5,675.00	3,262.00	3,262.00	26.06	124.48	35.60	-2,232.60	-401.63	3,146.52	3,045.73	100.79	31.220		
7,100.00	5,675.00	3,262.00	3,262.00	26.72	124.48	35.60	-2,232.60	-401.63	3,184.19	3,081.66	102.53	31.056		
7,200.00	5,675.00	3,262.00	3,262.00	27.41	124.48	35.60	-2,232.60	-401.63	3,224.51	3,120.22	104.29	30.918		
7,300.00	5,675.00	3,262.00	3,262.00	28.13	124.48	35.60	-2,232.60	-401.63	3,267.41	3,161.35	106.06	30.808		
7,400.00	5,675.00	3,262.00	3,262.00	28.88	124.48	35.60	-2,232.60	-401.63	3,312.76	3,204.95	107.81	30.727		
7,500.00	5,675.00	3,262.00	3,262.00	29.66	124.48	35.60	-2,232.60	-401.63	3,360.49	3,250.93	109.55	30.674		
7,600.00	5,675.00	3,262.00	3,262.00	30.45	124.48	35.60	-2,232.60	-401.63	3,410.47	3,299.21	111.27	30.651		
7,700.00	5,675.00	3,262.00	3,262.00	31.27	124.48	35.60	-2,232.60	-401.63	3,462.63	3,349.68	112.94	30.658		
7,800.00	5,675.00	3,262.00	3,262.00	32.10	124.48	35.60	-2,232.60	-401.63	3,516.85	3,402.27	114.58	30.692		
7,900.00	5,675.00	3,262.00	3,262.00	32.95	124.48	35.60	-2,232.60	-401.63	3,573.05	3,456.87	116.18	30.754		
8,000.00	5,675.00	3,262.00	3,262.00	33.82	124.48	35.60	-2,232.60	-401.63	3,631.14	3,513.41	117.73	30.843		
8,100.00	5,675.00	3,262.00	3,262.00	34.70	124.48	35.60	-2,232.60	-401.63	3,691.02	3,571.79	119.23	30.958		
8,200.00	5,675.00	3,262.00	3,262.00	35.60	124.48	35.60	-2,232.60	-401.63	3,752.61	3,631.93	120.68	31.097		
8,300.00	5,675.00	3,262.00	3,262.00	36.51	124.48	35.60	-2,232.60	-401.63	3,815.82	3,693.75	122.07	31.259		
8,400.00	5,675.00	3,262.00	3,262.00	37.43	124.48	35.60	-2,232.60	-401.63	3,880.59	3,757.17	123.41	31.443		
8,500.00	5,675.00	3,262.00	3,262.00	38.37	124.48	35.60	-2,232.60	-401.63	3,946.83	3,822.12	124.71	31.649		
8,600.00	5,675.00	3,262.00	3,262.00	39.31	124.48	35.60	-2,232.60	-401.63	4,014.46	3,888.51	125.95	31.874		
8,700.00	5,675.00	3,262.00	3,262.00	40.26	124.48	35.60	-2,232.60	-401.63	4,083.42	3,956.29	127.14	32.118		
8,800.00	5,675.00	3,262.00	3,262.00	41.22	124.48	35.60	-2,232.60	-401.63	4,153.65	4,025.37	128.28	32.380		
8,900.00	5,675.00	3,262.00	3,262.00	42.19	124.48	35.60	-2,232.60	-401.63	4,225.08	4,095.70	129.37	32.659		
9,000.00	5,675.00	3,262.00	3,262.00	43.17	124.48	35.60	-2,232.60	-401.63	4,297.64	4,167.22	130.42	32.953		
9,100.00	5,675.00	3,262.00	3,262.00	44.15	124.48	35.60	-2,232.60	-401.63	4,371.29	4,239.87	131.42	33.262		
9,200.00	5,675.00	3,262.00	3,262.00	45.14	124.48	35.60	-2,232.60	-401.63	4,445.97	4,313.59	132.38	33.586		
9,300.00	5,675.00	3,262.00	3,262.00	46.14	124.48	35.60	-2,232.60	-401.63	4,521.62	4,388.33	133.29	33.922		
9,400.00	5,675.00	3,262.00	3,262.00	47.15	124.48	35.60	-2,232.60	-401.63	4,598.21	4,464.04	134.17	34.271		
9,500.00	5,675.00	3,262.00	3,262.00	48.15	124.48	35.60	-2,232.60	-401.63	4,675.68	4,540.67	135.01	34.632		
9,600.00	5,675.00	3,262.00	3,262.00	49.17	124.48	35.60	-2,232.60	-401.63	4,753.99	4,618.18	135.81	35.004		
9,700.00	5,675.00	3,262.00	3,262.00	50.19	124.48	35.60	-2,232.60	-401.63	4,833.11	4,696.53	136.58	35.386		
9,800.00	5,675.00	3,262.00	3,262.00	51.21	124.48	35.60	-2,232.60	-401.63	4,912.98	4,775.66	137.32	35.779		
9,900.00	5,675.00	3,262.00	3,262.00	52.24	124.48	35.60	-2,232.60	-401.63	4,993.58	4,855.56	138.02	36.180		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH-FEDERAL A #6 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 300-UNKNOWN													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.00	0.00	0.00	0.00	0.00	0.00	-149.39	-1,250.52	-739.94	1,453.23					
100.00	100.00	76.00	76.00	0.29	1.49	-149.39	-1,250.52	-739.94	1,453.04	1,451.25	1.78	815.650		
200.00	200.00	176.00	176.00	0.65	3.46	-149.39	-1,250.52	-739.94	1,453.04	1,448.93	4.11	353.831		
300.00	300.00	276.00	276.00	1.00	5.43	-149.39	-1,250.52	-739.94	1,453.04	1,446.60	6.43	225.917		
400.00	399.98	375.98	375.98	1.35	8.94	-40.55	-1,250.52	-739.94	1,451.71	1,441.42	10.29	141.058		
500.00	499.84	475.84	475.84	1.70	12.93	-40.74	-1,250.52	-739.94	1,447.73	1,433.10	14.63	98.936		
600.00	599.45	575.45	575.45	2.05	16.92	-41.05	-1,250.52	-739.94	1,441.14	1,422.16	18.97	75.967		
700.00	698.70	674.70	674.70	2.41	20.89	-41.49	-1,250.52	-739.94	1,431.95	1,408.65	23.30	61.465		
800.00	797.47	773.47	773.47	2.77	24.84	-42.06	-1,250.52	-739.94	1,420.22	1,392.61	27.61	51.445		
900.00	895.62	871.62	871.62	3.14	28.76	-42.77	-1,250.52	-739.94	1,406.01	1,374.12	31.89	44.084		
1,000.00	993.06	969.06	969.06	3.52	32.66	-43.63	-1,250.52	-739.94	1,389.41	1,353.26	36.16	38.429		
1,100.00	1,089.87	1,065.87	1,065.87	3.91	36.53	-44.41	-1,250.52	-739.94	1,371.15	1,330.75	40.39	33.944		
1,200.00	1,186.65	1,162.65	1,162.65	4.30	40.41	-45.15	-1,250.52	-739.94	1,353.00	1,308.37	44.63	30.315		
1,300.00	1,283.44	1,259.44	1,259.44	4.69	44.28	-45.90	-1,250.52	-739.94	1,335.07	1,286.20	48.87	27.319		
1,400.00	1,380.22	1,356.22	1,356.22	5.09	48.15	-46.67	-1,250.52	-739.94	1,317.39	1,264.27	53.11	24.803		
1,500.00	1,477.00	1,453.00	1,453.00	5.49	52.02	-47.46	-1,250.52	-739.94	1,299.95	1,242.59	57.36	22.663		
1,600.00	1,573.78	1,549.78	1,549.78	5.89	55.89	-48.28	-1,250.52	-739.94	1,282.77	1,221.16	61.61	20.821		
1,700.00	1,670.56	1,646.56	1,646.56	6.29	59.76	-49.11	-1,250.52	-739.94	1,265.85	1,199.99	65.86	19.220		
1,800.00	1,767.35	1,743.35	1,743.35	6.69	63.63	-49.97	-1,250.52	-739.94	1,249.21	1,179.10	70.11	17.817		
1,900.00	1,864.13	1,840.13	1,840.13	7.10	67.51	-50.85	-1,250.52	-739.94	1,232.86	1,158.49	74.37	16.577		
2,000.00	1,960.91	1,936.91	1,936.91	7.50	71.38	-51.75	-1,250.52	-739.94	1,216.82	1,138.19	78.63	15.475		
2,100.00	2,057.69	2,033.69	2,033.69	7.90	75.25	-52.67	-1,250.52	-739.94	1,201.08	1,118.19	82.89	14.490		
2,200.00	2,154.47	2,130.47	2,130.47	8.31	79.12	-53.62	-1,250.52	-739.94	1,185.67	1,098.52	87.15	13.604		
2,300.00	2,251.26	2,227.26	2,227.26	8.71	82.99	-54.59	-1,250.52	-739.94	1,170.60	1,079.18	91.42	12.805		
2,400.00	2,348.04	2,324.04	2,324.04	9.12	86.86	-55.58	-1,250.52	-739.94	1,155.88	1,060.19	95.69	12.080		
2,500.00	2,444.82	2,420.82	2,420.82	9.52	90.73	-56.60	-1,250.52	-739.94	1,141.53	1,041.57	99.96	11.420		
2,600.00	2,541.62	2,517.62	2,517.62	9.93	94.60	-51.99	-1,250.52	-739.94	1,126.87	1,022.64	104.23	10.811		
2,699.99	2,638.44	2,614.44	2,614.44	10.33	98.48	-44.99	-1,250.52	-739.94	1,110.00	1,001.51	108.50	10.231		
2,800.00	2,735.22	2,711.22	2,711.22	10.74	102.35	-45.26	-1,250.52	-739.94	1,091.87	979.11	112.76	9.683		
2,900.00	2,832.01	2,808.01	2,808.01	11.14	106.22	-46.19	-1,250.52	-739.94	1,074.01	956.99	117.02	9.178		
3,000.00	2,928.79	2,904.79	2,904.79	11.54	110.09	-47.16	-1,250.52	-739.94	1,056.45	935.16	121.29	8.710		
3,100.00	3,025.57	3,001.57	3,001.57	11.95	113.96	-48.16	-1,250.52	-739.94	1,039.20	913.64	125.56	8.277		
3,200.00	3,122.35	3,098.35	3,098.35	12.35	117.83	-49.19	-1,250.52	-739.94	1,022.28	892.45	129.83	7.874		
3,300.00	3,219.14	3,195.00	3,195.00	12.76	121.70	-50.26	-1,250.52	-739.94	1,005.71	871.61	134.10	7.500		
3,400.00	3,315.92	3,195.00	3,195.00	13.16	121.70	-50.26	-1,250.52	-739.94	994.23	860.27	133.96	7.422 SF		
3,464.77	3,378.61	3,195.00	3,195.00	13.42	121.70	-50.26	-1,250.52	-739.94	992.12	858.94	133.18	7.449 CC, ES		
3,500.00	3,412.70	3,195.00	3,195.00	13.57	121.70	-50.26	-1,250.52	-739.94	992.74	860.21	132.53	7.491		
3,600.00	3,509.48	3,195.00	3,195.00	13.97	121.70	-50.26	-1,250.52	-739.94	1,001.29	871.44	129.86	7.711		
3,700.00	3,606.27	3,195.00	3,195.00	14.38	121.70	-50.26	-1,250.52	-739.94	1,019.62	893.55	126.08	8.087		
3,800.00	3,703.05	3,195.00	3,195.00	14.78	121.70	-50.26	-1,250.52	-739.94	1,047.22	925.81	121.42	8.625		
3,900.00	3,799.83	3,195.00	3,195.00	15.19	121.70	-50.26	-1,250.52	-739.94	1,083.38	967.24	116.15	9.328		
4,000.00	3,896.61	3,195.00	3,195.00	15.60	121.70	-50.26	-1,250.52	-739.94	1,127.28	1,016.75	110.53	10.199		
4,100.00	3,993.40	3,195.00	3,195.00	16.00	121.70	-50.26	-1,250.52	-739.94	1,178.05	1,073.26	104.80	11.242		
4,200.00	4,090.18	3,195.00	3,195.00	16.41	121.70	-50.26	-1,250.52	-739.94	1,234.85	1,135.73	99.12	12.458		
4,300.00	4,186.96	3,195.00	3,195.00	16.82	121.70	-50.26	-1,250.52	-739.94	1,296.88	1,203.24	93.65	13.849		
4,400.00	4,283.74	3,195.00	3,195.00	17.23	121.70	-50.26	-1,250.52	-739.94	1,363.43	1,274.98	88.45	15.415		
4,500.00	4,380.53	3,195.00	3,195.00	17.63	121.70	-50.26	-1,250.52	-739.94	1,433.87	1,350.29	83.58	17.155		
4,600.00	4,477.31	3,195.00	3,195.00	18.04	121.70	-49.94	-1,250.52	-739.94	1,507.66	1,428.60	79.07	19.068		
4,700.00	4,575.17	3,195.00	3,195.00	18.43	121.70	-38.95	-1,250.52	-739.94	1,584.81	1,509.99	74.82	21.182		
4,800.00	4,674.18	3,195.00	3,195.00	18.77	121.70	-8.27	-1,250.52	-739.94	1,664.65	1,593.87	70.78	23.519		
4,900.00	4,773.25	3,195.00	3,195.00	19.07	121.70	24.34	-1,250.52	-739.94	1,745.99	1,679.03	66.97	26.072		
5,000.00	4,871.30	3,195.00	3,195.00	19.33	121.70	36.23	-1,250.52	-739.94	1,827.81	1,764.38	63.42	28.819		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - BURCH-FEDERAL A #6 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 300-UNKNOWN													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance Between Centres		Minimum Separation (usft)	Separation Factor	Warning	
				Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,100.00	4,967.25	3,195.00	3,195.00	19.57	121.70	38.03	-1,250.52	-739.94	1,909.19	1,849.00	60.20	31.716		
5,200.00	5,060.05	3,195.00	3,195.00	19.79	121.70	36.39	-1,250.52	-739.94	1,989.36	1,932.03	57.34	34.695		
5,300.00	5,148.68	3,195.00	3,195.00	20.00	121.70	33.68	-1,250.52	-739.94	2,067.64	2,012.72	54.92	37.650		
5,400.00	5,232.18	3,195.00	3,195.00	20.19	121.70	30.80	-1,250.52	-739.94	2,143.41	2,090.40	53.01	40.437		
5,500.00	5,309.62	3,195.00	3,195.00	20.38	121.70	28.09	-1,250.52	-739.94	2,216.15	2,164.47	51.68	42.883		
5,600.00	5,380.17	3,195.00	3,195.00	20.57	121.70	25.68	-1,250.52	-739.94	2,285.38	2,234.38	50.99	44.816		
5,700.00	5,443.04	3,195.00	3,195.00	20.77	121.70	23.58	-1,250.52	-739.94	2,350.69	2,299.69	50.99	46.097		
5,799.99	5,497.55	3,195.00	3,195.00	20.98	121.70	21.76	-1,250.52	-739.94	2,411.70	2,360.02	51.69	46.661		
5,900.00	5,547.55	3,195.00	3,195.00	21.24	121.70	21.74	-1,250.52	-739.94	2,471.70	2,418.81	52.89	46.733		
5,999.99	5,597.55	3,195.00	3,195.00	21.54	121.70	21.74	-1,250.52	-739.94	2,534.21	2,479.85	54.36	46.622		
6,100.00	5,639.98	3,195.00	3,195.00	21.86	121.70	19.24	-1,250.52	-739.94	2,592.85	2,536.62	56.23	46.111		
6,200.00	5,666.06	3,195.00	3,195.00	22.21	121.70	17.54	-1,250.52	-739.94	2,640.32	2,581.60	58.72	44.964		
6,299.99	5,675.00	3,195.00	3,195.00	22.54	121.70	16.42	-1,250.52	-739.94	2,675.80	2,614.06	61.74	43.337		
6,400.00	5,675.00	3,195.00	3,195.00	22.90	121.70	16.41	-1,250.52	-739.94	2,706.56	2,641.50	65.05	41.604		
6,500.00	5,675.00	3,195.00	3,195.00	23.32	121.70	16.41	-1,250.52	-739.94	2,740.62	2,672.21	68.41	40.062		
6,600.00	5,675.00	3,195.00	3,195.00	23.78	121.70	16.41	-1,250.52	-739.94	2,777.86	2,706.10	71.76	38.712		
6,700.00	5,675.00	3,195.00	3,195.00	24.29	121.70	16.41	-1,250.52	-739.94	2,818.16	2,743.09	75.07	37.542		
6,800.00	5,675.00	3,195.00	3,195.00	24.84	121.70	16.41	-1,250.52	-739.94	2,861.39	2,783.07	78.31	36.538		
6,900.00	5,675.00	3,195.00	3,195.00	25.43	121.70	16.41	-1,250.52	-739.94	2,907.41	2,825.94	81.47	35.686		
7,000.00	5,675.00	3,195.00	3,195.00	26.06	121.70	16.41	-1,250.52	-739.94	2,956.11	2,871.58	84.53	34.971		
7,100.00	5,675.00	3,195.00	3,195.00	26.72	121.70	16.41	-1,250.52	-739.94	3,007.34	2,919.86	87.48	34.377		
7,200.00	5,675.00	3,195.00	3,195.00	27.41	121.70	16.41	-1,250.52	-739.94	3,060.98	2,970.67	90.31	33.893		
7,300.00	5,675.00	3,195.00	3,195.00	28.13	121.70	16.41	-1,250.52	-739.94	3,116.91	3,023.88	93.03	33.506		
7,400.00	5,675.00	3,195.00	3,195.00	28.88	121.70	16.41	-1,250.52	-739.94	3,175.00	3,079.39	95.62	33.206		
7,500.00	5,675.00	3,195.00	3,195.00	29.66	121.70	16.41	-1,250.52	-739.94	3,235.14	3,137.06	98.08	32.983		
7,600.00	5,675.00	3,195.00	3,195.00	30.45	121.70	16.41	-1,250.52	-739.94	3,297.22	3,196.79	100.43	32.830		
7,700.00	5,675.00	3,195.00	3,195.00	31.27	121.70	16.41	-1,250.52	-739.94	3,361.13	3,258.47	102.66	32.739		
7,800.00	5,675.00	3,195.00	3,195.00	32.10	121.70	16.41	-1,250.52	-739.94	3,426.76	3,321.98	104.78	32.704		
7,900.00	5,675.00	3,195.00	3,195.00	32.95	121.70	16.41	-1,250.52	-739.94	3,494.03	3,387.24	106.79	32.719		
8,000.00	5,675.00	3,195.00	3,195.00	33.82	121.70	16.41	-1,250.52	-739.94	3,562.83	3,454.14	108.69	32.780		
8,100.00	5,675.00	3,195.00	3,195.00	34.70	121.70	16.41	-1,250.52	-739.94	3,633.08	3,522.59	110.49	32.882		
8,200.00	5,675.00	3,195.00	3,195.00	35.60	121.70	16.41	-1,250.52	-739.94	3,704.70	3,592.50	112.19	33.020		
8,300.00	5,675.00	3,195.00	3,195.00	36.51	121.70	16.41	-1,250.52	-739.94	3,777.60	3,663.80	113.81	33.193		
8,400.00	5,675.00	3,195.00	3,195.00	37.43	121.70	16.41	-1,250.52	-739.94	3,851.73	3,736.39	115.33	33.396		
8,500.00	5,675.00	3,195.00	3,195.00	38.37	121.70	16.41	-1,250.52	-739.94	3,927.00	3,810.22	116.78	33.628		
8,600.00	5,675.00	3,195.00	3,195.00	39.31	121.70	16.41	-1,250.52	-739.94	4,003.35	3,885.21	118.15	33.884		
8,700.00	5,675.00	3,195.00	3,195.00	40.26	121.70	16.41	-1,250.52	-739.94	4,080.73	3,961.29	119.44	34.165		
8,800.00	5,675.00	3,195.00	3,195.00	41.22	121.70	16.41	-1,250.52	-739.94	4,159.07	4,038.40	120.67	34.467		
8,900.00	5,675.00	3,195.00	3,195.00	42.19	121.70	16.41	-1,250.52	-739.94	4,238.32	4,116.49	121.83	34.788		
9,000.00	5,675.00	3,195.00	3,195.00	43.17	121.70	16.41	-1,250.52	-739.94	4,318.44	4,195.51	122.93	35.128		
9,100.00	5,675.00	3,195.00	3,195.00	44.15	121.70	16.41	-1,250.52	-739.94	4,399.37	4,275.39	123.98	35.485		
9,200.00	5,675.00	3,195.00	3,195.00	45.14	121.70	16.41	-1,250.52	-739.94	4,481.07	4,356.10	124.97	35.857		
9,300.00	5,675.00	3,195.00	3,195.00	46.14	121.70	16.41	-1,250.52	-739.94	4,563.49	4,437.58	125.91	36.244		
9,400.00	5,675.00	3,195.00	3,195.00	47.15	121.70	16.41	-1,250.52	-739.94	4,646.61	4,519.81	126.80	36.644		
9,500.00	5,675.00	3,195.00	3,195.00	48.15	121.70	16.41	-1,250.52	-739.94	4,730.38	4,602.73	127.65	37.057		
9,600.00	5,675.00	3,195.00	3,195.00	49.17	121.70	16.41	-1,250.52	-739.94	4,814.77	4,686.31	128.46	37.481		
9,700.00	5,675.00	3,195.00	3,195.00	50.19	121.70	16.41	-1,250.52	-739.94	4,899.75	4,770.52	129.23	37.915		
9,800.00	5,675.00	3,195.00	3,195.00	51.21	121.70	16.41	-1,250.52	-739.94	4,985.28	4,855.32	129.96	38.360		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - JENKINS B FEDERAL #18 - Wellbore #1 - Wellbore #1														Offset Site Error:	0.00 usft
Survey Program: 200-INC-ONLY														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning		
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
0.00	0.00	0.00	0.00	0.00	0.00	42.20	379.93	344.51	512.88						
100.00	100.00	96.00	96.00	0.29	0.80	42.20	379.93	344.51	512.87	511.79	1.08	473.963			
200.00	200.00	196.00	196.00	0.65	1.62	42.20	379.93	344.51	512.87	510.60	2.27	226.032			
300.00	300.00	296.00	296.00	1.00	3.52	42.20	379.93	344.51	512.87	508.34	4.52	113.350 CC			
400.00	399.98	396.80	396.80	1.35	5.48	151.18	379.93	344.51	514.40	507.57	6.83	75.307 ES			
500.00	499.84	495.84	495.84	1.70	7.64	151.41	379.93	344.51	518.99	509.65	9.34	55.574			
600.00	599.45	595.98	595.97	2.05	9.83	151.73	380.87	344.51	527.35	515.47	11.88	44.393			
700.00	698.70	697.73	697.71	2.41	12.05	152.29	380.42	344.51	537.81	523.35	14.46	37.201			
800.00	797.47	793.49	793.47	2.77	14.11	152.93	379.93	344.51	551.37	534.49	16.88	32.661			
900.00	895.62	891.65	891.62	3.14	16.20	153.65	379.93	344.51	568.48	549.15	19.33	29.415			
1,000.00	993.06	991.31	991.27	3.52	18.32	154.43	380.33	344.51	589.09	567.29	21.80	27.020			
1,100.00	1,089.87	1,085.92	1,085.87	3.91	20.24	155.39	379.93	344.51	611.60	587.52	24.08	25.401			
1,200.00	1,186.65	1,182.70	1,182.65	4.30	22.07	156.33	379.93	344.51	634.68	608.43	26.25	24.177			
1,300.00	1,283.44	1,280.21	1,280.15	4.69	23.91	157.16	380.75	344.51	658.46	630.02	28.44	23.152			
1,400.00	1,380.22	1,378.97	1,378.91	5.09	25.77	158.02	380.37	344.51	681.59	650.93	30.65	22.235			
1,500.00	1,477.00	1,473.06	1,473.00	5.49	27.57	158.79	379.93	344.51	704.80	671.99	32.81	21.483			
1,600.00	1,573.78	1,569.85	1,569.78	5.89	29.48	159.50	379.93	344.51	728.41	693.35	35.06	20.774			
1,700.00	1,670.56	1,666.77	1,666.71	6.29	31.39	160.16	380.14	344.51	752.26	714.93	37.32	20.155			
1,800.00	1,767.35	1,764.06	1,764.00	6.69	33.30	160.79	380.06	344.51	776.01	736.42	39.59	19.600			
1,900.00	1,864.13	1,860.19	1,860.13	7.10	35.24	161.39	379.93	344.51	799.81	757.93	41.89	19.095			
2,000.00	1,960.91	1,956.97	1,956.91	7.50	37.37	161.94	379.93	344.51	823.78	779.41	44.37	18.567			
2,100.00	2,057.69	2,053.76	2,053.69	7.90	39.50	162.47	379.93	344.51	847.81	800.96	46.85	18.096			
2,200.00	2,154.47	2,152.31	2,152.23	8.31	41.67	162.91	381.10	344.51	872.59	823.21	49.37	17.673			
2,300.00	2,251.26	2,251.49	2,251.40	8.71	43.85	163.42	380.53	344.51	896.41	844.50	51.91	17.268			
2,400.00	2,348.04	2,344.14	2,344.04	9.12	45.80	163.88	379.93	344.51	920.27	866.06	54.21	16.977			
2,500.00	2,444.82	2,440.92	2,440.82	9.52	47.63	164.31	379.93	344.51	944.53	888.14	56.39	16.750			
2,600.00	2,541.62	2,537.81	2,537.70	9.93	49.46	170.45	380.89	344.51	969.49	910.92	58.57	16.552			
2,699.99	2,638.44	2,636.81	2,636.70	10.33	51.33	178.83	380.67	344.51	994.27	933.48	60.80	16.354			
2,800.00	2,735.22	2,735.92	2,735.79	10.74	53.20	179.54	380.07	344.51	1,019.11	956.09	63.02	16.171			
2,900.00	2,832.01	2,828.13	2,828.01	11.14	54.78	179.56	379.93	344.51	1,044.18	979.23	64.95	16.078			
3,000.00	2,928.79	2,924.91	2,924.79	11.54	56.40	179.57	379.93	344.51	1,069.34	1,002.43	66.92	15.980			
3,100.00	3,025.57	3,022.12	3,021.99	11.95	58.02	179.57	380.13	344.51	1,094.61	1,025.72	68.89	15.888			
3,200.00	3,122.35	3,119.56	3,119.43	12.35	59.65	179.59	380.01	344.51	1,119.71	1,048.83	70.88	15.798			
3,300.00	3,219.14	3,215.26	3,215.14	12.76	61.38	179.60	379.93	344.51	1,144.83	1,071.87	72.95	15.693			
3,400.00	3,315.92	3,312.04	3,311.92	13.16	63.22	179.61	379.93	344.51	1,169.99	1,094.85	75.14	15.570			
3,500.00	3,412.70	3,409.16	3,409.03	13.57	65.06	179.61	380.14	344.51	1,195.27	1,117.92	77.34	15.454			
3,600.00	3,509.48	3,506.66	3,506.53	13.97	66.91	179.62	380.04	344.51	1,220.37	1,140.83	79.55	15.341			
3,700.00	3,606.27	3,602.39	3,602.27	14.38	68.73	179.63	379.93	344.51	1,245.47	1,163.76	81.72	15.241			
3,800.00	3,703.05	3,699.18	3,699.05	14.78	70.57	179.64	379.93	344.51	1,270.64	1,186.73	83.91	15.143			
3,900.00	3,799.83	3,795.96	3,795.83	15.19	72.41	179.65	379.93	344.51	1,295.80	1,209.69	86.10	15.049			
4,000.00	3,896.61	3,894.82	3,894.68	15.60	74.29	179.62	380.90	344.51	1,321.50	1,233.16	88.34	14.959			
4,100.00	3,993.40	3,994.26	3,994.12	16.00	76.18	179.64	380.45	344.51	1,346.41	1,255.83	90.59	14.863			
4,200.00	4,090.18	4,086.33	4,086.18	16.41	77.93	179.67	379.93	344.51	1,371.28	1,278.60	92.68	14.795			
4,300.00	4,186.96	4,183.11	4,182.96	16.82	79.77	179.67	379.93	344.51	1,396.44	1,301.57	94.88	14.718			
4,400.00	4,283.74	4,279.90	4,279.74	17.23	81.61	179.68	379.93	344.51	1,421.61	1,324.53	97.07	14.645			
4,500.00	4,380.53	4,377.14	4,376.99	17.63	83.46	179.67	380.18	344.51	1,446.91	1,347.63	99.28	14.574			
4,600.00	4,477.31	4,474.63	4,474.48	18.04	85.31	-179.51	380.08	344.51	1,472.00	1,370.51	101.49	14.504			
4,700.00	4,575.17	4,571.33	4,571.17	18.43	87.17	-160.78	379.93	344.51	1,492.07	1,388.37	103.70	14.389			
4,800.00	4,674.18	4,670.34	4,670.18	18.77	89.26	-122.12	379.93	344.51	1,503.25	1,397.12	106.13	14.165			
4,900.00	4,773.25	4,769.41	4,769.25	19.07	91.35	-81.68	379.93	344.51	1,505.41	1,396.88	108.54	13.870			
5,000.00	4,871.30	4,869.86	4,869.70	19.33	93.46	-62.61	380.85	344.51	1,499.20	1,388.24	110.96	13.511			
5,100.00	4,967.25	4,969.08	4,968.90	19.57	95.56	-54.64	380.39	344.51	1,483.57	1,370.23	113.34	13.089			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - JENKINS B FEDERAL #18 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 200-INC-ONLY													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,200.00	5,060.05	5,056.22	5,056.05	19.79	97.34	-51.35	379.93	344.51	1,459.67	1,344.29	115.38	12.651	
5,300.00	5,148.68	5,144.86	5,144.68	20.00	99.02	-50.69	379.93	344.51	1,428.39	1,311.08	117.31	12.176	
5,400.00	5,232.18	5,228.35	5,228.18	20.19	100.61	-51.70	379.93	344.51	1,390.17	1,271.04	119.13	11.669	
5,500.00	5,309.62	5,308.92	5,308.73	20.38	102.14	-54.13	380.67	344.51	1,346.40	1,225.51	120.90	11.137	
5,600.00	5,380.17	5,382.39	5,382.20	20.57	103.54	-57.65	380.30	344.51	1,296.91	1,174.37	122.53	10.584	
5,700.00	5,443.04	5,439.24	5,439.04	20.77	104.62	-61.80	379.93	344.51	1,243.58	1,119.72	123.85	10.041	
5,799.99	5,497.55	5,493.74	5,493.55	20.98	105.70	-66.85	379.93	344.51	1,188.12	1,062.92	125.21	9.489	
5,900.00	5,547.55	5,543.75	5,543.55	21.24	106.68	-69.25	379.93	344.51	1,133.81	1,007.29	126.52	8.961	
5,999.99	5,597.55	5,593.75	5,593.55	21.54	107.67	-71.69	379.93	344.51	1,083.71	955.80	127.91	8.472	
6,100.00	5,639.98	5,636.24	5,636.04	21.86	108.50	-79.06	380.15	344.51	1,036.74	907.51	129.23	8.023	
6,200.00	5,666.06	5,662.58	5,662.38	22.21	109.02	-85.44	380.14	344.51	993.08	862.79	130.29	7.622	
6,299.99	5,675.00	5,671.61	5,671.41	22.54	109.20	-89.98	380.14	344.51	956.18	825.12	131.06	7.296	
6,400.00	5,675.00	5,671.61	5,671.41	22.90	109.20	-90.03	380.14	344.51	928.39	796.71	131.68	7.050	
6,500.00	5,675.00	5,671.61	5,671.41	23.32	109.20	-90.03	380.14	344.51	910.79	778.47	132.32	6.883	
6,600.00	5,675.00	5,671.61	5,671.41	23.78	109.20	-90.03	380.14	344.51	903.97	771.04	132.93	6.800	
6,611.80	5,675.00	5,671.61	5,671.41	23.84	109.20	-90.03	380.14	344.51	903.89	770.89	133.00	6.796 SF	
6,700.00	5,675.00	5,671.61	5,671.41	24.29	109.20	-90.03	380.14	344.51	908.18	774.69	133.49	6.804	
6,800.00	5,675.00	5,671.61	5,671.41	24.84	109.20	-90.03	380.14	344.51	923.27	789.32	133.95	6.893	
6,900.00	5,675.00	5,671.61	5,671.41	25.43	109.20	-90.03	380.14	344.51	948.71	814.42	134.29	7.064	
7,000.00	5,675.00	5,671.61	5,671.41	26.06	109.20	-90.03	380.14	344.51	983.71	849.18	134.53	7.312	
7,100.00	5,675.00	5,671.61	5,671.41	26.72	109.20	-90.03	380.14	344.51	1,027.28	892.62	134.66	7.629	
7,200.00	5,675.00	5,671.61	5,671.41	27.41	109.20	-90.03	380.14	344.51	1,078.40	943.69	134.71	8.005	
7,300.00	5,675.00	5,671.61	5,671.41	28.13	109.20	-90.03	380.14	344.51	1,136.03	1,001.33	134.70	8.434	
7,400.00	5,675.00	5,671.61	5,671.41	28.88	109.20	-90.03	380.14	344.51	1,199.25	1,064.61	134.64	8.907	
7,500.00	5,675.00	5,671.61	5,671.41	29.66	109.20	-90.03	380.14	344.51	1,267.22	1,132.67	134.55	9.418	
7,600.00	5,675.00	5,671.61	5,671.41	30.45	109.20	-90.03	380.14	344.51	1,339.20	1,204.76	134.44	9.961	
7,700.00	5,675.00	5,671.61	5,671.41	31.27	109.20	-90.03	380.14	344.51	1,414.60	1,280.28	134.32	10.531	
7,800.00	5,675.00	5,671.61	5,671.41	32.10	109.20	-90.03	380.14	344.51	1,492.89	1,358.69	134.20	11.125	
7,900.00	5,675.00	5,671.61	5,671.41	32.95	109.20	-90.03	380.14	344.51	1,573.64	1,439.57	134.08	11.737	
8,000.00	5,675.00	5,671.61	5,671.41	33.82	109.20	-90.03	380.14	344.51	1,656.50	1,522.54	133.96	12.366	
8,100.00	5,675.00	5,671.61	5,671.41	34.70	109.20	-90.03	380.14	344.51	1,741.15	1,607.31	133.84	13.009	
8,200.00	5,675.00	5,671.61	5,671.41	35.60	109.20	-90.03	380.14	344.51	1,827.36	1,693.62	133.74	13.664	
8,300.00	5,675.00	5,671.61	5,671.41	36.51	109.20	-90.03	380.14	344.51	1,914.91	1,781.27	133.64	14.329	
8,400.00	5,675.00	5,671.61	5,671.41	37.43	109.20	-90.03	380.14	344.51	2,003.62	1,870.08	133.55	15.003	
8,500.00	5,675.00	5,671.61	5,671.41	38.37	109.20	-90.03	380.14	344.51	2,093.36	1,959.89	133.46	15.685	
8,600.00	5,675.00	5,671.61	5,671.41	39.31	109.20	-90.03	380.14	344.51	2,183.98	2,050.60	133.38	16.374	
8,700.00	5,675.00	5,671.61	5,671.41	40.26	109.20	-90.03	380.14	344.51	2,275.39	2,142.08	133.31	17.068	
8,800.00	5,675.00	5,671.61	5,671.41	41.22	109.20	-90.03	380.14	344.51	2,367.49	2,234.25	133.25	17.768	
8,900.00	5,675.00	5,671.61	5,671.41	42.19	109.20	-90.03	380.14	344.51	2,460.21	2,327.03	133.19	18.472	
9,000.00	5,675.00	5,671.61	5,671.41	43.17	109.20	-90.03	380.14	344.51	2,553.49	2,420.35	133.14	19.179	
9,100.00	5,675.00	5,671.61	5,671.41	44.15	109.20	-90.03	380.14	344.51	2,647.25	2,514.16	133.09	19.891	
9,200.00	5,675.00	5,671.61	5,671.41	45.14	109.20	-90.03	380.14	344.51	2,741.45	2,608.40	133.05	20.605	
9,300.00	5,675.00	5,671.61	5,671.41	46.14	109.20	-90.03	380.14	344.51	2,836.05	2,703.04	133.01	21.322	
9,400.00	5,675.00	5,671.61	5,671.41	47.15	109.20	-90.03	380.14	344.51	2,931.01	2,798.03	132.98	22.041	
9,500.00	5,675.00	5,671.61	5,671.41	48.15	109.20	-90.03	380.14	344.51	3,026.29	2,893.34	132.95	22.763	
9,600.00	5,675.00	5,671.60	5,671.41	49.17	109.20	-90.03	380.14	344.51	3,121.87	2,988.94	132.93	23.486	
9,700.00	5,675.00	5,671.60	5,671.41	50.19	109.20	-90.03	380.14	344.51	3,217.72	3,084.81	132.91	24.211	
9,800.00	5,675.00	5,671.60	5,671.41	51.21	109.20	-90.03	380.14	344.51	3,313.81	3,180.92	132.89	24.937	
9,900.00	5,675.00	5,671.60	5,671.41	52.24	109.20	-90.03	380.14	344.51	3,410.13	3,277.25	132.88	25.664	
10,000.00	5,675.00	5,671.60	5,671.41	53.27	109.20	-90.03	380.14	344.51	3,506.65	3,373.78	132.87	26.392	
10,100.00	5,675.00	5,671.60	5,671.41	54.31	109.20	-90.03	380.14	344.51	3,603.36	3,470.50	132.86	27.122	
10,200.00	5,675.00	5,671.60	5,671.41	55.34	109.20	-90.03	380.14	344.51	3,700.25	3,567.40	132.85	27.852	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design:OCHO_TESORO OFFSETS - JENKINS B FEDERAL #18 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program:		200-INC-ONLY					Rule Assigned:				Offset Well Error:	0.00 usft		
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance			Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,300.00	5,675.00	5,671.60	5,671.41	56.39	109.20	-90.03	380.14	344.51	3,797.30	3,664.45	132.85	28.583		
10,400.00	5,675.00	5,671.60	5,671.40	57.43	109.20	-90.03	380.14	344.51	3,894.50	3,761.64	132.85	29.314		
10,500.00	5,675.00	5,671.60	5,671.40	58.48	109.20	-90.03	380.14	344.51	3,991.83	3,858.98	132.86	30.046		
10,600.00	5,675.00	5,671.60	5,671.40	59.53	109.20	-90.03	380.14	344.51	4,089.30	3,956.43	132.86	30.778		
10,700.00	5,675.00	5,671.60	5,671.40	60.59	109.20	-90.03	380.14	344.51	4,186.88	4,054.01	132.87	31.510		
10,800.00	5,675.00	5,671.60	5,671.40	61.64	109.20	-90.03	380.14	344.51	4,284.58	4,151.70	132.88	32.243		
10,900.00	5,675.00	5,671.60	5,671.40	62.70	109.20	-90.03	380.14	344.51	4,382.38	4,249.48	132.90	32.976		
11,000.00	5,675.00	5,671.60	5,671.40	63.77	109.20	-90.03	380.14	344.51	4,480.28	4,347.37	132.91	33.708		
11,100.00	5,675.00	5,671.60	5,671.40	64.83	109.20	-90.03	380.14	344.51	4,578.27	4,445.34	132.93	34.441		
11,200.00	5,675.00	5,671.60	5,671.40	65.90	109.20	-90.03	380.14	344.51	4,676.34	4,543.39	132.95	35.174		
11,300.00	5,675.00	5,671.60	5,671.40	66.96	109.20	-90.03	380.14	344.51	4,774.49	4,641.52	132.97	35.907		
11,400.00	5,675.00	5,671.60	5,671.40	68.03	109.20	-90.03	380.14	344.51	4,872.72	4,739.73	132.99	36.639		
11,431.20	5,675.00	5,671.60	5,671.40	68.37	109.20	-90.03	380.14	344.51	4,903.38	4,770.38	133.00	36.868		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTIRE A #8 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 485-INC-ONLY													Offset Well Error:
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	
0.00	0.00	0.00	0.00	0.00	0.00	129.29	-2,910.85	3,557.41	4,596.57				
100.00	100.00	85.00	85.00	0.29	0.82	129.29	-2,910.85	3,557.41	4,596.54	4,595.44	1.10	4,165.734	
200.00	200.00	185.00	185.00	0.65	1.78	129.29	-2,910.85	3,557.41	4,596.54	4,594.12	2.42	1,897.327	
300.00	300.00	285.00	285.00	1.00	2.74	129.29	-2,910.85	3,557.41	4,596.54	4,592.80	3.74	1,228.410	
400.00	399.98	384.98	384.98	1.35	3.70	-121.81	-2,910.85	3,557.41	4,597.46	4,592.41	5.05	910.278	
500.00	499.84	484.84	484.84	1.70	4.66	-121.82	-2,910.85	3,557.41	4,600.23	4,593.87	6.36	723.758	
600.00	599.45	584.45	584.45	2.05	6.70	-121.83	-2,910.85	3,557.41	4,604.83	4,596.09	8.75	526.459	
700.00	698.70	683.70	683.70	2.41	8.89	-121.85	-2,910.85	3,557.41	4,611.30	4,600.00	11.30	408.194	
800.00	797.47	782.47	782.47	2.77	11.07	-121.87	-2,910.85	3,557.41	4,619.63	4,605.79	13.84	333.763	
900.00	895.62	878.19	878.18	3.14	13.18	-121.90	-2,909.68	3,557.41	4,629.12	4,612.79	16.32	283.590	
1,000.00	993.06	967.37	967.35	3.52	15.15	-121.90	-2,909.88	3,557.41	4,641.37	4,622.70	18.67	248.646	
1,100.00	1,089.87	1,056.03	1,056.01	3.91	17.11	-122.07	-2,910.34	3,557.41	4,655.25	4,634.25	21.00	221.656	
1,200.00	1,186.65	1,171.69	1,171.65	4.30	19.80	-122.37	-2,910.85	3,557.41	4,669.27	4,645.19	24.08	193.944	
1,300.00	1,283.44	1,268.47	1,268.44	4.69	22.22	-122.62	-2,910.85	3,557.41	4,683.10	4,656.23	26.87	174.271	
1,400.00	1,380.22	1,364.70	1,364.65	5.09	24.62	-122.88	-2,909.56	3,557.41	4,696.24	4,666.58	29.66	158.348	
1,500.00	1,477.00	1,450.33	1,450.28	5.49	26.76	-123.10	-2,909.74	3,557.41	4,710.39	4,678.21	32.18	146.380	
1,600.00	1,573.78	1,536.03	1,535.97	5.89	28.90	-123.32	-2,910.26	3,557.41	4,724.86	4,690.16	34.70	136.151	
1,700.00	1,670.56	1,655.63	1,655.56	6.29	32.01	-123.62	-2,910.85	3,557.41	4,739.37	4,701.16	38.20	124.060	
1,800.00	1,767.35	1,752.41	1,752.35	6.69	34.63	-123.87	-2,910.85	3,557.41	4,753.66	4,712.45	41.22	115.336	
1,900.00	1,864.13	1,833.82	1,833.72	7.10	36.84	-124.09	-2,909.70	3,557.41	4,767.39	4,723.58	43.81	108.818	
2,000.00	1,960.91	1,946.03	1,945.91	7.50	39.89	-124.36	-2,910.85	3,557.41	4,782.52	4,735.27	47.25	101.222	
2,100.00	2,057.69	2,042.81	2,042.69	7.90	42.74	-124.60	-2,910.85	3,557.41	4,797.09	4,746.60	50.49	95.016	
2,200.00	2,154.47	2,139.60	2,139.47	8.31	45.59	-124.84	-2,910.85	3,557.41	4,811.74	4,758.01	53.73	89.560	
2,300.00	2,251.26	2,229.46	2,229.31	8.71	48.24	-125.08	-2,909.03	3,557.41	4,825.43	4,768.67	56.76	85.014	
2,400.00	2,348.04	2,312.04	2,311.87	9.12	50.67	-125.28	-2,909.45	3,557.41	4,840.54	4,780.97	59.58	81.246	
2,500.00	2,444.82	2,394.71	2,394.52	9.52	53.11	-125.48	-2,910.30	3,557.41	4,856.02	4,793.62	62.40	77.822	
2,600.00	2,541.62	2,526.82	2,526.62	9.93	57.63	-120.21	-2,910.85	3,557.41	4,870.43	4,803.11	67.32	72.349	
2,699.99	2,638.44	2,623.68	2,623.44	10.33	61.16	-112.63	-2,910.85	3,557.41	4,881.84	4,810.60	71.24	68.530	
2,800.00	2,735.22	2,716.82	2,716.54	10.74	64.88	-112.27	-2,909.54	3,557.41	4,890.87	4,815.52	75.36	64.904	
2,900.00	2,832.01	2,817.35	2,817.01	11.14	68.90	-112.53	-2,910.85	3,557.41	4,901.46	4,821.69	79.76	61.450	
3,000.00	2,928.79	2,907.86	2,907.48	11.54	72.44	-112.79	-2,909.62	3,557.41	4,910.75	4,827.05	83.71	58.667	
3,100.00	3,025.57	3,011.00	3,010.57	11.95	76.43	-113.06	-2,910.85	3,557.41	4,921.50	4,833.41	88.09	55.870	
3,200.00	3,122.35	3,107.78	3,107.35	12.35	79.90	-113.32	-2,910.85	3,557.41	4,931.68	4,839.73	91.96	53.631	
3,300.00	3,219.14	3,180.29	3,179.79	12.76	82.50	-113.53	-2,909.27	3,557.41	4,941.18	4,846.24	94.94	52.043	
3,400.00	3,315.92	3,301.48	3,300.92	13.16	86.86	-113.84	-2,910.85	3,557.41	4,952.37	4,852.67	99.70	49.675	
3,500.00	3,412.70	3,398.26	3,397.70	13.57	90.34	-114.10	-2,910.85	3,557.41	4,962.87	4,859.30	103.57	47.917	
3,600.00	3,509.48	3,471.87	3,471.27	13.97	92.99	-114.30	-2,909.77	3,557.41	4,972.96	4,866.36	106.61	46.647	
3,700.00	3,606.27	3,591.89	3,591.27	14.38	97.42	-114.61	-2,910.85	3,557.41	4,984.19	4,872.75	111.44	44.725	
3,800.00	3,703.05	3,688.68	3,688.05	14.78	101.15	-114.87	-2,910.85	3,557.41	4,995.01	4,879.44	115.57	43.222	
5,200.00	5,060.05	5,023.92	5,022.86	19.79	144.45	18.86	-2,909.32	3,557.41	4,995.68	4,831.86	163.82	30.495	
5,300.00	5,148.68	5,134.79	5,133.68	20.00	147.77	24.01	-2,910.85	3,557.41	4,952.77	4,785.41	167.36	29.594	
5,400.00	5,232.18	5,218.28	5,217.18	20.19	150.16	28.62	-2,910.85	3,557.41	4,902.00	4,732.05	169.94	28.845	
5,500.00	5,309.62	5,289.44	5,288.32	20.38	152.21	33.22	-2,909.84	3,557.41	4,844.19	4,672.03	172.15	28.139	
5,600.00	5,380.17	5,345.12	5,343.98	20.57	153.81	38.12	-2,910.16	3,557.41	4,781.24	4,607.34	173.90	27.494	
5,700.00	5,443.04	5,429.19	5,428.04	20.77	156.32	43.89	-2,910.85	3,557.41	4,713.36	4,536.80	176.56	26.696	
5,799.99	5,497.55	5,483.69	5,482.55	20.98	158.09	50.26	-2,910.85	3,557.41	4,641.04	4,462.59	178.45	26.007	
5,900.00	5,547.55	5,524.75	5,523.58	21.24	159.42	50.84	-2,910.01	3,557.41	4,566.66	4,386.75	179.91	25.384	
5,999.99	5,597.55	5,560.18	5,559.00	21.54	160.57	51.28	-2,910.25	3,557.41	4,493.36	4,312.16	181.20	24.798	
6,100.00	5,639.98	5,626.17	5,624.98	21.86	162.77	61.94	-2,910.85	3,557.41	4,417.39	4,233.84	183.55	24.066	
6,200.00	5,666.06	5,652.25	5,651.06	22.21	163.68	75.14	-2,910.85	3,557.41	4,336.72	4,152.12	184.61	23.492	
6,299.99	5,675.00	5,661.19	5,660.00	22.54	163.99	89.80	-2,910.85	3,557.41	4,254.19	4,069.14	185.05	22.989	
6,400.00	5,675.00	5,661.19	5,660.00	22.90	163.99	90.00	-2,910.85	3,557.41	4,171.94	3,986.75	185.20	22.527	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTIRE A #8 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 485-INC-ONLY		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance				Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
6,500.00	5,675.00	5,661.19	5,660.00	23.32	163.99	90.00	-2,910.85	3,557.41	4,090.50	3,905.13	185.37	22.066		
6,600.00	5,675.00	5,661.19	5,660.00	23.78	163.99	90.00	-2,910.85	3,557.41	4,009.89	3,824.31	185.58	21.607		
6,700.00	5,675.00	5,661.19	5,660.00	24.29	163.99	90.00	-2,910.85	3,557.41	3,930.18	3,744.35	185.83	21.150		
6,800.00	5,675.00	5,661.19	5,660.00	24.84	163.99	90.00	-2,910.85	3,557.41	3,851.41	3,665.30	186.11	20.694		
6,900.00	5,675.00	5,661.19	5,660.00	25.43	163.99	90.00	-2,910.85	3,557.41	3,773.65	3,587.21	186.44	20.240		
7,000.00	5,675.00	5,661.19	5,660.00	26.06	163.99	90.00	-2,910.85	3,557.41	3,696.96	3,510.15	186.81	19.789		
7,100.00	5,675.00	5,661.19	5,660.00	26.72	163.99	90.00	-2,910.85	3,557.41	3,621.41	3,434.17	187.23	19.342		
7,200.00	5,675.00	5,661.19	5,660.00	27.41	163.99	90.00	-2,910.85	3,557.41	3,547.06	3,359.36	187.70	18.897		
7,300.00	5,675.00	5,661.19	5,660.00	28.13	163.99	90.00	-2,910.85	3,557.41	3,474.01	3,285.78	188.22	18.457		
7,400.00	5,675.00	5,661.19	5,660.00	28.88	163.99	90.00	-2,910.85	3,557.41	3,402.32	3,213.52	188.80	18.021		
7,500.00	5,675.00	5,661.19	5,660.00	29.66	163.99	90.00	-2,910.85	3,557.41	3,332.09	3,142.67	189.43	17.591		
7,600.00	5,675.00	5,661.19	5,660.00	30.45	163.99	90.00	-2,910.85	3,557.41	3,263.42	3,073.31	190.11	17.166		
7,700.00	5,675.00	5,661.19	5,660.00	31.27	163.99	90.00	-2,910.85	3,557.41	3,196.40	3,005.55	190.85	16.748		
7,800.00	5,675.00	5,661.19	5,660.00	32.10	163.99	90.00	-2,910.85	3,557.41	3,131.14	2,939.49	191.66	16.337		
7,900.00	5,675.00	5,661.19	5,660.00	32.95	163.99	90.00	-2,910.85	3,557.41	3,067.76	2,875.24	192.51	15.935		
8,000.00	5,675.00	5,661.19	5,660.00	33.82	163.99	90.00	-2,910.85	3,557.41	3,006.36	2,812.93	193.43	15.542		
8,100.00	5,675.00	5,661.19	5,660.00	34.70	163.99	90.00	-2,910.85	3,557.41	2,947.08	2,752.67	194.41	15.159		
8,200.00	5,675.00	5,661.19	5,660.00	35.60	163.99	90.00	-2,910.85	3,557.41	2,890.04	2,694.60	195.44	14.788		
8,300.00	5,675.00	5,661.19	5,660.00	36.51	163.99	90.00	-2,910.85	3,557.41	2,835.38	2,638.86	196.52	14.428		
8,400.00	5,675.00	5,661.19	5,660.00	37.43	163.99	90.00	-2,910.85	3,557.41	2,783.25	2,585.59	197.65	14.081		
8,500.00	5,675.00	5,661.19	5,660.00	38.37	163.99	90.00	-2,910.85	3,557.41	2,733.78	2,534.94	198.83	13.749		
8,600.00	5,675.00	5,661.19	5,660.00	39.31	163.99	90.00	-2,910.85	3,557.41	2,687.12	2,487.06	200.05	13.432		
8,700.00	5,675.00	5,661.19	5,660.00	40.26	163.99	90.00	-2,910.85	3,557.41	2,643.42	2,442.11	201.31	13.131		
8,800.00	5,675.00	5,661.19	5,660.00	41.22	163.99	90.00	-2,910.85	3,557.41	2,602.83	2,400.23	202.60	12.847		
8,900.00	5,675.00	5,661.19	5,660.00	42.19	163.99	90.00	-2,910.85	3,557.41	2,565.50	2,361.59	203.91	12.582		
9,000.00	5,675.00	5,661.19	5,660.00	43.17	163.99	90.00	-2,910.85	3,557.41	2,531.57	2,326.34	205.23	12.335		
9,100.00	5,675.00	5,661.19	5,660.00	44.15	163.99	90.00	-2,910.85	3,557.41	2,501.19	2,294.63	206.56	12.109		
9,200.00	5,675.00	5,661.19	5,660.00	45.14	163.99	90.00	-2,910.85	3,557.41	2,474.47	2,266.59	207.89	11.903		
9,300.00	5,675.00	5,661.19	5,660.00	46.14	163.99	90.00	-2,910.85	3,557.41	2,451.54	2,242.35	209.20	11.719		
9,400.00	5,675.00	5,661.19	5,660.00	47.15	163.99	90.00	-2,910.85	3,557.41	2,432.52	2,222.03	210.48	11.557		
9,500.00	5,675.00	5,661.19	5,660.00	48.15	163.99	90.00	-2,910.85	3,557.41	2,417.48	2,205.74	211.74	11.417		
9,600.00	5,675.00	5,661.19	5,660.00	49.17	163.99	90.00	-2,910.85	3,557.41	2,406.51	2,193.56	212.94	11.301		
9,700.00	5,675.00	5,661.19	5,660.00	50.19	163.99	90.00	-2,910.85	3,557.41	2,399.65	2,185.55	214.10	11.208		
9,800.00	5,675.00	5,661.19	5,660.00	51.21	163.99	90.00	-2,910.85	3,557.41	2,396.96	2,181.76	215.19	11.139		
9,814.00	5,675.00	5,661.19	5,660.00	51.35	163.99	90.00	-2,910.85	3,557.41	2,396.91	2,181.57	215.34	11.131 CC, ES		
9,900.00	5,675.00	5,661.19	5,660.00	52.24	163.99	90.00	-2,910.85	3,557.41	2,398.43	2,182.21	216.22	11.093		
10,000.00	5,675.00	5,661.19	5,660.00	53.27	163.99	90.00	-2,910.85	3,557.41	2,404.07	2,186.90	217.17	11.070 SF		
10,100.00	5,675.00	5,661.19	5,660.00	54.31	163.99	90.00	-2,910.85	3,557.41	2,413.84	2,195.79	218.04	11.070		
10,200.00	5,675.00	5,661.19	5,660.00	55.34	163.99	90.00	-2,910.85	3,557.41	2,427.69	2,208.86	218.83	11.094		
10,300.00	5,675.00	5,661.19	5,660.00	56.39	163.99	90.00	-2,910.85	3,557.41	2,445.56	2,226.02	219.54	11.140		
10,400.00	5,675.00	5,661.19	5,660.00	57.43	163.99	90.00	-2,910.85	3,557.41	2,467.35	2,247.19	220.16	11.207		
10,500.00	5,675.00	5,661.19	5,660.00	58.48	163.99	90.00	-2,910.85	3,557.41	2,492.97	2,272.27	220.69	11.296		
10,600.00	5,675.00	5,661.19	5,660.00	59.53	163.99	90.00	-2,910.85	3,557.41	2,522.29	2,301.14	221.15	11.405		
10,700.00	5,675.00	5,661.19	5,660.00	60.59	163.99	90.00	-2,910.85	3,557.41	2,555.19	2,333.67	221.52	11.535		
10,800.00	5,675.00	5,661.19	5,660.00	61.64	163.99	90.00	-2,910.85	3,557.41	2,591.54	2,369.72	221.82	11.683		
10,900.00	5,675.00	5,661.19	5,660.00	62.70	163.99	90.00	-2,910.85	3,557.41	2,631.19	2,409.13	222.06	11.849		
11,000.00	5,675.00	5,661.19	5,660.00	63.77	163.99	90.00	-2,910.85	3,557.41	2,673.99	2,451.77	222.22	12.033		
11,100.00	5,675.00	5,661.19	5,660.00	64.83	163.99	90.00	-2,910.85	3,557.41	2,719.80	2,497.47	222.33	12.233		
11,200.00	5,675.00	5,661.19	5,660.00	65.90	163.99	90.00	-2,910.85	3,557.41	2,768.46	2,546.08	222.38	12.449		
11,300.00	5,675.00	5,661.19	5,660.00	66.96	163.99	90.00	-2,910.85	3,557.41	2,819.83	2,597.45	222.38	12.680		
11,400.00	5,675.00	5,661.19	5,660.00	68.03	163.99	90.00	-2,910.85	3,557.41	2,873.76	2,651.42	222.34	12.925		
11,431.20	5,675.00	5,661.19	5,660.00	68.37	163.99	90.00	-2,910.85	3,557.41	2,891.09	2,668.77	222.32	13.004		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTYRE A #17 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 202-INC-ONLY													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N-S (usft)	+E-W (usft)					
0.00	0.00	0.00	0.00	0.00	0.00	127.87	-2,785.77	3,581.92	4,537.72				
100.00	100.00	85.00	85.00	0.29	0.85	127.87	-2,785.77	3,581.92	4,537.69	4,536.56	1.13	3,999.924	
200.00	200.00	185.00	185.00	0.65	1.85	127.87	-2,785.77	3,581.92	4,537.69	4,535.20	2.49	1,822.241	
300.00	300.00	285.00	285.00	1.00	3.78	127.87	-2,785.77	3,581.92	4,537.69	4,532.91	4.78	948.551	
400.00	399.98	372.47	372.46	1.35	5.64	-123.23	-2,785.41	3,581.92	4,538.45	4,531.45	6.99	648.962	
500.00	499.84	484.85	484.84	1.70	8.03	-123.24	-2,785.77	3,581.92	4,541.52	4,531.79	9.73	466.756	
600.00	599.45	584.46	584.45	2.05	10.15	-123.25	-2,785.77	3,581.92	4,546.31	4,534.11	12.20	372.559	
700.00	698.70	673.00	672.98	2.41	12.04	-123.25	-2,785.17	3,581.92	4,552.68	4,538.23	14.45	315.157	
800.00	797.47	782.49	782.47	2.77	14.39	-123.28	-2,785.77	3,581.92	4,561.69	4,544.52	17.16	265.764	
900.00	895.62	879.71	879.67	3.14	16.63	-123.30	-2,785.30	3,581.92	4,572.01	4,552.24	19.77	231.211	
1,000.00	993.06	959.33	959.30	3.52	18.47	-123.27	-2,785.59	3,581.92	4,584.80	4,562.82	21.98	208.553	
1,100.00	1,089.87	1,074.91	1,074.87	3.91	21.31	-123.51	-2,785.77	3,581.92	4,598.96	4,573.75	25.20	182.473	
1,200.00	1,186.65	1,158.27	1,158.21	4.30	23.40	-123.73	-2,785.05	3,581.92	4,612.81	4,585.14	27.66	166.740	
1,300.00	1,283.44	1,268.51	1,268.44	4.69	26.15	-124.01	-2,785.77	3,581.92	4,627.56	4,596.76	30.80	150.226	
1,400.00	1,380.22	1,365.29	1,365.22	5.09	28.58	-124.27	-2,785.77	3,581.92	4,642.00	4,608.38	33.62	138.087	
1,500.00	1,477.00	1,446.09	1,446.00	5.49	30.61	-124.48	-2,785.02	3,581.92	4,656.12	4,620.09	36.03	129.236	
1,600.00	1,573.78	1,558.88	1,558.78	5.89	33.45	-124.77	-2,785.77	3,581.92	4,671.15	4,631.90	39.25	119.016	
1,700.00	1,670.56	1,655.67	1,655.56	6.29	35.88	-125.01	-2,785.77	3,581.92	4,685.86	4,643.79	42.07	111.384	
1,800.00	1,767.35	1,738.00	1,737.88	6.69	37.95	-125.23	-2,784.95	3,581.92	4,700.21	4,655.69	44.53	105.561	
1,900.00	1,864.13	1,849.26	1,849.13	7.10	40.80	-125.50	-2,785.77	3,581.92	4,715.55	4,667.79	47.76	98.733	
2,000.00	1,960.91	1,927.66	1,927.52	7.50	42.94	-125.70	-2,785.46	3,581.92	4,730.38	4,680.10	50.28	94.080	
2,100.00	2,057.69	2,042.84	2,042.69	7.90	46.25	-125.99	-2,785.77	3,581.92	4,745.58	4,691.60	53.99	87.900	
2,200.00	2,154.47	2,115.54	2,115.36	8.31	48.39	-126.17	-2,785.11	3,581.92	4,760.43	4,703.92	56.51	84.243	
2,300.00	2,251.26	2,236.45	2,236.26	8.71	51.95	-126.47	-2,785.77	3,581.92	4,775.96	4,715.50	60.46	78.989	
2,400.00	2,348.04	2,322.25	2,322.04	9.12	54.49	-126.69	-2,784.73	3,581.92	4,790.71	4,727.33	63.38	75.584	
2,500.00	2,444.82	2,430.06	2,429.82	9.52	57.67	-126.94	-2,785.77	3,581.92	4,806.67	4,739.72	66.96	71.787	
2,600.00	2,541.62	2,526.87	2,526.62	9.93	60.54	-121.58	-2,785.77	3,581.92	4,821.39	4,751.18	70.21	68.669	
2,699.99	2,638.44	2,600.59	2,600.32	10.33	62.73	-113.94	-2,784.99	3,581.92	4,832.97	4,760.19	72.78	66.404	
2,800.00	2,735.22	2,709.61	2,709.31	10.74	65.96	-113.60	-2,785.44	3,581.92	4,843.50	4,767.09	76.41	63.389	
2,900.00	2,832.01	2,817.32	2,817.01	11.14	69.07	-113.89	-2,785.77	3,581.92	4,854.08	4,774.16	79.92	60.738	
3,000.00	2,928.79	2,904.35	2,904.01	11.54	71.56	-114.14	-2,784.65	3,581.92	4,864.02	4,781.22	82.80	58.745	
3,100.00	3,025.57	3,010.94	3,010.57	11.95	74.61	-114.42	-2,785.77	3,581.92	4,875.23	4,788.99	86.24	56.531	
3,200.00	3,122.35	3,107.72	3,107.35	12.35	77.16	-114.68	-2,785.77	3,581.92	4,885.97	4,796.78	89.19	54.783	
3,300.00	3,219.14	3,191.27	3,190.88	12.76	79.36	-114.91	-2,784.86	3,581.92	4,896.36	4,804.58	91.78	53.348	
3,400.00	3,315.92	3,301.33	3,300.92	13.16	82.27	-115.20	-2,785.77	3,581.92	4,907.76	4,812.68	95.08	51.616	
3,500.00	3,412.70	3,398.11	3,397.70	13.57	84.82	-115.46	-2,785.77	3,581.92	4,918.82	4,820.79	98.03	50.177	
3,600.00	3,509.48	3,475.99	3,475.57	13.97	86.88	-115.67	-2,785.23	3,581.92	4,929.74	4,829.27	100.47	49.066	
3,700.00	3,606.27	3,591.70	3,591.27	14.38	90.07	-115.97	-2,785.77	3,581.92	4,941.23	4,837.17	104.07	47.482	
3,800.00	3,703.05	3,680.14	3,679.69	14.78	92.60	-116.21	-2,784.87	3,581.92	4,952.15	4,845.17	106.99	46.287	
3,900.00	3,799.83	3,785.30	3,784.83	15.19	95.62	-116.48	-2,785.77	3,581.92	4,964.06	4,853.66	110.40	44.963	
4,000.00	3,896.61	3,882.09	3,881.61	15.60	98.51	-116.73	-2,785.77	3,581.92	4,975.62	4,861.94	113.68	43.769	
4,100.00	3,993.40	3,959.11	3,958.60	16.00	100.80	-116.94	-2,784.93	3,581.92	4,986.92	4,870.56	116.36	42.858	
4,200.00	4,090.18	4,075.70	4,075.18	16.41	104.22	-117.23	-2,785.77	3,581.92	4,999.05	4,878.88	120.17	41.598	
5,100.00	4,967.25	4,937.65	4,936.96	19.57	128.94	10.86	-2,784.54	3,581.92	4,994.58	4,846.54	148.04	33.738	
5,200.00	5,060.05	5,016.75	5,016.04	19.79	131.20	17.35	-2,785.30	3,581.92	4,958.87	4,808.33	150.54	32.941	
5,300.00	5,148.68	5,052.00	5,051.29	20.00	132.22	22.22	-2,785.77	3,581.92	4,915.73	4,764.00	151.73	32.399	
5,400.00	5,232.18	5,052.00	5,051.29	20.19	132.22	26.37	-2,785.77	3,581.92	4,866.58	4,714.76	151.83	32.054	
5,500.00	5,309.62	5,052.00	5,051.29	20.38	132.22	30.33	-2,785.77	3,581.92	4,811.95	4,660.08	151.87	31.684	
5,600.00	5,380.17	5,052.00	5,051.29	20.57	132.22	34.41	-2,785.77	3,581.92	4,752.23	4,600.36	151.87	31.291	
5,700.00	5,443.04	5,052.00	5,051.29	20.77	132.22	38.80	-2,785.77	3,581.92	4,687.92	4,536.08	151.84	30.874	
5,799.99	5,497.55	5,052.00	5,051.29	20.98	132.22	43.68	-2,785.77	3,581.92	4,619.53	4,467.74	151.79	30.434	
5,900.00	5,547.55	5,052.00	5,051.29	21.24	132.22	43.75	-2,785.77	3,581.92	4,549.78	4,398.05	151.72	29.987	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design:OCHO_TESORO OFFSETS - MCINTYRE A #17 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 202-INC-ONLY		Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned: Distance			Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,999.99	5,597.55	5,052.00	5,051.29	21.54	132.22	43.75	-2,785.77	3,581.92	4,481.18	4,329.54	151.65	29.550		
6,100.00	5,639.98	5,052.00	5,051.29	21.86	132.22	51.23	-2,785.77	3,581.92	4,409.55	4,257.97	151.58	29.090		
6,200.00	5,666.06	5,052.00	5,051.29	22.21	132.22	61.55	-2,785.77	3,581.92	4,331.72	4,180.17	151.55	28.582		
6,299.99	5,675.00	5,052.00	5,051.29	22.54	132.22	74.80	-2,785.77	3,581.92	4,249.78	4,098.20	151.58	28.037		
6,400.00	5,675.00	5,052.00	5,051.29	22.90	132.22	75.00	-2,785.77	3,581.92	4,166.85	4,015.20	151.65	27.477		
6,500.00	5,675.00	5,052.00	5,051.29	23.32	132.22	75.00	-2,785.77	3,581.92	4,084.69	3,932.95	151.74	26.919		
6,600.00	5,675.00	5,052.00	5,051.29	23.78	132.22	75.00	-2,785.77	3,581.92	4,003.35	3,851.48	151.87	26.361		
6,700.00	5,675.00	5,052.00	5,051.29	24.29	132.22	75.00	-2,785.77	3,581.92	3,922.87	3,770.85	152.02	25.805		
6,800.00	5,675.00	5,052.00	5,051.29	24.84	132.22	75.00	-2,785.77	3,581.92	3,843.31	3,691.09	152.21	25.250		
6,900.00	5,675.00	5,052.00	5,051.29	25.43	132.22	75.00	-2,785.77	3,581.92	3,764.72	3,612.28	152.44	24.697		
7,000.00	5,675.00	5,052.00	5,051.29	26.06	132.22	75.00	-2,785.77	3,581.92	3,687.16	3,534.46	152.70	24.146		
7,100.00	5,675.00	5,052.00	5,051.29	26.72	132.22	75.00	-2,785.77	3,581.92	3,610.72	3,457.70	153.01	23.598		
7,200.00	5,675.00	5,052.00	5,051.29	27.41	132.22	75.00	-2,785.77	3,581.92	3,535.44	3,382.08	153.36	23.053		
7,300.00	5,675.00	5,052.00	5,051.29	28.13	132.22	75.00	-2,785.77	3,581.92	3,461.42	3,307.66	153.76	22.512		
7,400.00	5,675.00	5,052.00	5,051.29	28.88	132.22	75.00	-2,785.77	3,581.92	3,388.74	3,234.53	154.20	21.976		
7,500.00	5,675.00	5,052.00	5,051.29	29.66	132.22	75.00	-2,785.77	3,581.92	3,317.47	3,162.77	154.70	21.444		
7,600.00	5,675.00	5,052.00	5,051.29	30.45	132.22	75.00	-2,785.77	3,581.92	3,247.72	3,092.48	155.25	20.920		
7,700.00	5,675.00	5,052.00	5,051.29	31.27	132.22	75.00	-2,785.77	3,581.92	3,179.59	3,023.74	155.85	20.402		
7,800.00	5,675.00	5,052.00	5,051.29	32.10	132.22	75.00	-2,785.77	3,581.92	3,113.18	2,956.68	156.50	19.892		
7,900.00	5,675.00	5,052.00	5,051.29	32.95	132.22	75.00	-2,785.77	3,581.92	3,048.60	2,891.39	157.21	19.391		
8,000.00	5,675.00	5,052.00	5,051.29	33.82	132.22	75.00	-2,785.77	3,581.92	2,985.98	2,828.00	157.98	18.901		
8,100.00	5,675.00	5,052.00	5,051.29	34.70	132.22	75.00	-2,785.77	3,581.92	2,925.43	2,766.63	158.80	18.422		
8,200.00	5,675.00	5,052.00	5,051.29	35.60	132.22	75.00	-2,785.77	3,581.92	2,867.10	2,707.42	159.67	17.956		
8,300.00	5,675.00	5,052.00	5,051.29	36.51	132.22	75.00	-2,785.77	3,581.92	2,811.11	2,650.51	160.60	17.504		
8,400.00	5,675.00	5,052.00	5,051.29	37.43	132.22	75.00	-2,785.77	3,581.92	2,757.61	2,596.04	161.58	17.067		
8,500.00	5,675.00	5,052.00	5,051.29	38.37	132.22	75.00	-2,785.77	3,581.92	2,706.75	2,544.15	162.60	16.647		
8,600.00	5,675.00	5,052.00	5,051.29	39.31	132.22	75.00	-2,785.77	3,581.92	2,658.68	2,495.01	163.67	16.244		
8,700.00	5,675.00	5,052.00	5,051.29	40.26	132.22	75.00	-2,785.77	3,581.92	2,613.56	2,448.78	164.78	15.861		
8,800.00	5,675.00	5,052.00	5,051.29	41.22	132.22	75.00	-2,785.77	3,581.92	2,571.53	2,405.61	165.92	15.498		
8,900.00	5,675.00	5,052.00	5,051.29	42.19	132.22	75.00	-2,785.77	3,581.92	2,532.76	2,365.66	167.10	15.157		
9,000.00	5,675.00	5,052.00	5,051.29	43.17	132.22	75.00	-2,785.77	3,581.92	2,497.39	2,329.09	168.30	14.839		
9,100.00	5,675.00	5,052.00	5,051.29	44.15	132.22	75.00	-2,785.77	3,581.92	2,465.57	2,296.06	169.51	14.545		
9,200.00	5,675.00	5,052.00	5,051.29	45.14	132.22	75.00	-2,785.77	3,581.92	2,437.44	2,266.71	170.73	14.276		
9,300.00	5,675.00	5,052.00	5,051.29	46.14	132.22	75.00	-2,785.77	3,581.92	2,413.14	2,241.18	171.95	14.034		
9,400.00	5,675.00	5,052.00	5,051.29	47.15	132.22	75.00	-2,785.77	3,581.92	2,392.76	2,219.60	173.16	13.818		
9,500.00	5,675.00	5,052.00	5,051.29	48.15	132.22	75.00	-2,785.77	3,581.92	2,376.43	2,202.07	174.36	13.630		
9,600.00	5,675.00	5,052.00	5,051.29	49.17	132.22	75.00	-2,785.77	3,581.92	2,364.21	2,188.69	175.52	13.469		
9,700.00	5,675.00	5,052.00	5,051.29	50.19	132.22	75.00	-2,785.77	3,581.92	2,356.18	2,179.52	176.66	13.338		
9,800.00	5,675.00	5,052.00	5,051.29	51.21	132.22	75.00	-2,785.77	3,581.92	2,352.38	2,174.63	177.74	13.235		
9,839.55	5,675.00	5,052.00	5,051.29	51.62	132.22	75.00	-2,785.77	3,581.92	2,352.04	2,173.88	178.16	13.202 CC, ES		
9,900.00	5,675.00	5,052.00	5,051.29	52.24	132.22	75.00	-2,785.77	3,581.92	2,352.82	2,174.04	178.78	13.161		
10,000.00	5,675.00	5,052.00	5,051.29	53.27	132.22	75.00	-2,785.77	3,581.92	2,357.51	2,177.75	179.75	13.115		
10,100.00	5,675.00	5,052.00	5,051.29	54.31	132.22	75.00	-2,785.77	3,581.92	2,366.42	2,185.75	180.67	13.098 SF		
10,200.00	5,675.00	5,052.00	5,051.29	55.34	132.22	75.00	-2,785.77	3,581.92	2,379.50	2,197.99	181.51	13.109		
10,300.00	5,675.00	5,052.00	5,051.29	56.39	132.22	75.00	-2,785.77	3,581.92	2,396.69	2,214.40	182.29	13.148		
10,400.00	5,675.00	5,052.00	5,051.29	57.43	132.22	75.00	-2,785.77	3,581.92	2,417.89	2,234.90	182.99	13.213		
10,500.00	5,675.00	5,052.00	5,051.29	58.48	132.22	75.00	-2,785.77	3,581.92	2,443.01	2,259.39	183.61	13.305		
10,600.00	5,675.00	5,052.00	5,051.29	59.53	132.22	75.00	-2,785.77	3,581.92	2,471.92	2,287.75	184.17	13.422		
10,700.00	5,675.00	5,052.00	5,051.29	60.59	132.22	75.00	-2,785.77	3,581.92	2,504.49	2,319.84	184.65	13.563		
10,800.00	5,675.00	5,052.00	5,051.29	61.64	132.22	75.00	-2,785.77	3,581.92	2,540.58	2,355.52	185.06	13.728		
10,900.00	5,675.00	5,052.00	5,051.29	62.70	132.22	75.00	-2,785.77	3,581.92	2,580.05	2,394.64	185.41	13.915		
11,000.00	5,675.00	5,052.00	5,051.29	63.77	132.22	75.00	-2,785.77	3,581.92	2,622.73	2,437.04	185.69	14.124		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTYRE A #17 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 202-INC-ONLY													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre			Rule Assigned:				Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
11,100.00	5,675.00	5,052.00	5,051.29	64.83	132.22	75.00	-2,785.77	3,581.92	2,668.49	2,482.57	185.92	14.353		
11,200.00	5,675.00	5,052.00	5,051.29	65.90	132.22	75.00	-2,785.77	3,581.92	2,717.15	2,531.06	186.09	14.601		
11,300.00	5,675.00	5,052.00	5,051.29	66.96	132.22	75.00	-2,785.77	3,581.92	2,768.57	2,582.36	186.21	14.868		
11,400.00	5,675.00	5,052.00	5,051.29	68.03	132.22	75.00	-2,785.77	3,581.92	2,822.60	2,636.31	186.29	15.152		
11,431.20	5,675.00	5,052.00	5,051.29	68.37	132.22	75.00	-2,785.77	3,581.92	2,839.97	2,653.66	186.30	15.244		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design:OCHO_TESORO OFFSETS - MCINTYRE A EAST FEDERAL #20 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft	
Survey Program: 220-INC-ONLY				Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:		Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
6,600.00	5,675.00	5,659.58	5,659.26	23.78	120.63	89.73	-2,973.64	4,688.58	4,995.18	4,853.48	141.70	35.252			
6,700.00	5,675.00	5,659.58	5,659.26	24.29	120.63	89.73	-2,973.64	4,688.58	4,908.43	4,766.57	141.86	34.601			
6,800.00	5,675.00	5,659.58	5,659.25	24.84	120.63	89.73	-2,973.64	4,688.58	4,822.20	4,680.15	142.05	33.948			
6,900.00	5,675.00	5,659.58	5,659.25	25.43	120.63	89.73	-2,973.64	4,688.58	4,736.50	4,594.24	142.27	33.293			
7,000.00	5,675.00	5,659.58	5,659.25	26.06	120.63	89.73	-2,973.64	4,688.58	4,651.38	4,508.87	142.51	32.638			
7,100.00	5,675.00	5,659.58	5,659.25	26.72	120.63	89.73	-2,973.64	4,688.58	4,566.86	4,424.07	142.79	31.983			
7,200.00	5,675.00	5,659.57	5,659.25	27.41	120.63	89.73	-2,973.64	4,688.58	4,482.98	4,339.87	143.10	31.327			
7,300.00	5,675.00	5,659.57	5,659.25	28.13	120.63	89.73	-2,973.64	4,688.58	4,399.77	4,256.32	143.45	30.671			
7,400.00	5,675.00	5,659.57	5,659.25	28.88	120.63	89.73	-2,973.64	4,688.58	4,317.27	4,173.43	143.84	30.015			
7,500.00	5,675.00	5,659.57	5,659.25	29.66	120.63	89.73	-2,973.64	4,688.58	4,235.53	4,091.26	144.26	29.360			
7,600.00	5,675.00	5,659.57	5,659.24	30.45	120.63	89.73	-2,973.64	4,688.58	4,154.58	4,009.85	144.73	28.706			
7,700.00	5,675.00	5,659.57	5,659.24	31.27	120.63	89.73	-2,973.64	4,688.58	4,074.49	3,929.25	145.24	28.053			
7,800.00	5,675.00	5,659.57	5,659.24	32.10	120.63	89.73	-2,973.64	4,688.58	3,995.29	3,849.49	145.80	27.403			
7,900.00	5,675.00	5,659.57	5,659.24	32.95	120.63	89.73	-2,973.64	4,688.58	3,917.04	3,770.64	146.40	26.756			
8,000.00	5,675.00	5,659.56	5,659.24	33.82	120.63	89.73	-2,973.64	4,688.58	3,839.80	3,692.75	147.05	26.112			
8,100.00	5,675.00	5,659.56	5,659.24	34.70	120.63	89.73	-2,973.64	4,688.58	3,763.63	3,615.88	147.75	25.473			
8,200.00	5,675.00	5,659.56	5,659.24	35.60	120.63	89.73	-2,973.64	4,688.58	3,688.61	3,540.10	148.50	24.839			
8,300.00	5,675.00	5,659.56	5,659.24	36.51	120.63	89.73	-2,973.64	4,688.58	3,614.79	3,465.48	149.30	24.211			
8,400.00	5,675.00	5,659.56	5,659.23	37.43	120.63	89.73	-2,973.64	4,688.58	3,542.25	3,392.09	150.16	23.590			
8,500.00	5,675.00	5,659.56	5,659.23	38.37	120.63	89.73	-2,973.64	4,688.58	3,471.08	3,320.01	151.07	22.976			
8,600.00	5,675.00	5,659.56	5,659.23	39.31	120.63	89.73	-2,973.64	4,688.58	3,401.37	3,249.33	152.04	22.371			
8,700.00	5,675.00	5,659.56	5,659.23	40.26	120.63	89.73	-2,973.64	4,688.58	3,333.19	3,180.13	153.06	21.777			
8,800.00	5,675.00	5,659.55	5,659.23	41.22	120.63	89.73	-2,973.64	4,688.58	3,266.66	3,112.52	154.14	21.193			
8,900.00	5,675.00	5,659.55	5,659.23	42.19	120.63	89.73	-2,973.64	4,688.58	3,201.86	3,046.59	155.27	20.621			
9,000.00	5,675.00	5,659.55	5,659.23	43.17	120.63	89.73	-2,973.64	4,688.58	3,138.92	2,982.46	156.46	20.062			
9,100.00	5,675.00	5,659.55	5,659.23	44.15	120.63	89.73	-2,973.64	4,688.58	3,077.93	2,920.24	157.70	19.518			
9,200.00	5,675.00	5,659.55	5,659.22	45.14	120.63	89.73	-2,973.64	4,688.58	3,019.03	2,860.05	158.98	18.989			
9,300.00	5,675.00	5,659.55	5,659.22	46.14	120.63	89.73	-2,973.64	4,688.58	2,962.33	2,802.01	160.32	18.477			
9,400.00	5,675.00	5,659.55	5,659.22	47.15	120.63	89.73	-2,973.64	4,688.58	2,907.97	2,746.27	161.70	17.983			
9,500.00	5,675.00	5,659.55	5,659.22	48.15	120.63	89.73	-2,973.64	4,688.58	2,856.07	2,692.95	163.13	17.508			
9,600.00	5,675.00	5,659.54	5,659.22	49.17	120.63	89.73	-2,973.64	4,688.58	2,806.78	2,642.20	164.59	17.054			
9,700.00	5,675.00	5,659.54	5,659.22	50.19	120.63	89.73	-2,973.64	4,688.58	2,760.24	2,594.16	166.08	16.620			
9,800.00	5,675.00	5,659.54	5,659.22	51.21	120.63	89.73	-2,973.64	4,688.58	2,716.58	2,548.98	167.59	16.209			
9,900.00	5,675.00	5,659.54	5,659.22	52.24	120.63	89.73	-2,973.64	4,688.58	2,675.94	2,506.82	169.12	15.822			
10,000.00	5,675.00	5,659.54	5,659.21	53.27	120.63	89.73	-2,973.64	4,688.58	2,638.47	2,467.81	170.66	15.460			
10,100.00	5,675.00	5,659.54	5,659.21	54.31	120.63	89.73	-2,973.64	4,688.58	2,604.30	2,432.10	172.20	15.123			
10,200.00	5,675.00	5,659.54	5,659.21	55.34	120.63	89.73	-2,973.64	4,688.58	2,573.57	2,399.84	173.73	14.813			
10,300.00	5,675.00	5,659.54	5,659.21	56.39	120.63	89.73	-2,973.64	4,688.58	2,546.40	2,371.15	175.24	14.531			
10,400.00	5,675.00	5,659.53	5,659.21	57.43	120.63	89.73	-2,973.64	4,688.58	2,522.90	2,346.18	176.72	14.276			
10,500.00	5,675.00	5,659.53	5,659.21	58.48	120.63	89.73	-2,973.64	4,688.58	2,503.18	2,325.01	178.16	14.050			
10,600.00	5,675.00	5,659.53	5,659.21	59.53	120.63	89.73	-2,973.64	4,688.58	2,487.32	2,307.77	179.55	13.853			
10,700.00	5,675.00	5,659.53	5,659.21	60.59	120.63	89.73	-2,973.64	4,688.58	2,475.41	2,294.53	180.87	13.686			
10,800.00	5,675.00	5,659.53	5,659.20	61.64	120.63	89.73	-2,973.64	4,688.58	2,467.49	2,285.36	182.13	13.548			
10,900.00	5,675.00	5,659.53	5,659.20	62.70	120.63	89.73	-2,973.64	4,688.58	2,463.61	2,280.31	183.30	13.440			
10,945.63	5,675.00	5,659.53	5,659.20	63.19	120.63	89.73	-2,973.64	4,688.58	2,463.19	2,279.38	183.81	13.401	CC, ES		
11,000.00	5,675.00	5,659.53	5,659.20	63.77	120.63	89.73	-2,973.64	4,688.58	2,463.79	2,279.40	184.39	13.362			
11,100.00	5,675.00	5,659.53	5,659.20	64.83	120.63	89.73	-2,973.64	4,688.58	2,468.02	2,282.63	185.39	13.313			
11,200.00	5,675.00	5,659.52	5,659.20	65.90	120.63	89.73	-2,973.64	4,688.58	2,476.29	2,290.00	186.29	13.293	SF		
11,300.00	5,675.00	5,659.52	5,659.20	66.96	120.63	89.73	-2,973.64	4,688.58	2,488.55	2,301.46	187.09	13.302			
11,400.00	5,675.00	5,659.52	5,659.20	68.03	120.63	89.73	-2,973.64	4,688.58	2,504.75	2,316.96	187.78	13.338			
11,431.20	5,675.00	5,659.52	5,659.20	68.37	120.63	89.73	-2,973.64	4,688.58	2,510.59	2,322.61	187.98	13.356			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTYRE A FEDERAL #14 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 300-UNKNOWN													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.00	0.00	0.00	0.00	0.00	0.00	115.83	-2,114.72	4,369.21	4,854.08					
100.00	100.00	97.00	97.00	0.29	1.86	115.83	-2,114.72	4,369.21	4,854.07	4,851.93	2.15	2,258.572		
200.00	200.00	197.00	197.00	0.65	3.78	115.83	-2,114.72	4,369.21	4,854.07	4,849.65	4.43	1,096.309		
300.00	300.00	297.00	297.00	1.00	5.70	115.83	-2,114.72	4,369.21	4,854.07	4,847.37	6.71	723.827		
400.00	399.98	396.98	396.98	1.35	9.64	-135.27	-2,114.72	4,369.21	4,855.31	4,844.32	10.99	441.744		
500.00	499.84	496.84	496.84	1.70	13.63	-135.26	-2,114.72	4,369.21	4,859.03	4,843.70	15.33	316.916		
600.00	599.45	596.45	596.45	2.05	17.62	-135.25	-2,114.72	4,369.21	4,865.24	4,845.57	19.67	247.341		
700.00	698.70	695.70	695.70	2.41	21.59	-135.22	-2,114.72	4,369.21	4,873.92	4,849.92	24.00	203.098		
800.00	797.47	794.47	794.47	2.77	25.54	-135.19	-2,114.72	4,369.21	4,885.09	4,856.78	28.31	172.557		
900.00	895.62	892.62	892.62	3.14	29.46	-135.16	-2,114.72	4,369.21	4,898.75	4,866.15	32.60	150.262		
1,000.00	993.06	990.06	990.06	3.52	33.36	-135.11	-2,114.72	4,369.21	4,914.90	4,878.03	36.87	133.314		
1,100.00	1,089.87	1,086.87	1,086.87	3.91	37.23	-135.24	-2,114.72	4,369.21	4,932.92	4,891.81	41.11	119.993		
1,200.00	1,186.65	1,183.65	1,183.65	4.30	41.11	-135.44	-2,114.72	4,369.21	4,951.11	4,905.76	45.35	109.175		
1,300.00	1,283.44	1,280.44	1,280.44	4.69	44.98	-135.64	-2,114.72	4,369.21	4,969.35	4,919.76	49.59	100.203		
1,400.00	1,380.22	1,377.22	1,377.22	5.09	48.85	-135.84	-2,114.72	4,369.21	4,987.66	4,933.82	53.84	92.643		
5,900.00	5,547.55	5,141.00	5,141.00	21.24	199.40	30.70	-2,114.72	4,369.21	4,983.99	4,765.37	218.62	22.797		
5,999.99	5,597.55	5,141.00	5,141.00	21.54	199.40	30.70	-2,114.72	4,369.21	4,906.76	4,688.27	218.49	22.458		
6,100.00	5,639.98	5,141.00	5,141.00	21.86	199.40	38.39	-2,114.72	4,369.21	4,825.98	4,607.62	218.36	22.101		
6,200.00	5,666.06	5,141.00	5,141.00	22.21	199.40	51.11	-2,114.72	4,369.21	4,738.51	4,520.25	218.25	21.711		
6,299.99	5,675.00	5,141.00	5,141.00	22.54	199.40	71.34	-2,114.72	4,369.21	4,646.71	4,428.50	218.21	21.295		
6,400.00	5,675.00	5,141.00	5,141.00	22.90	199.40	71.68	-2,114.72	4,369.21	4,553.68	4,335.49	218.19	20.870		
6,500.00	5,675.00	5,141.00	5,141.00	23.32	199.40	71.68	-2,114.72	4,369.21	4,460.97	4,242.78	218.19	20.445		
6,600.00	5,675.00	5,141.00	5,141.00	23.78	199.40	71.68	-2,114.72	4,369.21	4,368.57	4,150.38	218.20	20.021		
6,700.00	5,675.00	5,141.00	5,141.00	24.29	199.40	71.68	-2,114.72	4,369.21	4,276.52	4,058.31	218.22	19.597		
6,800.00	5,675.00	5,141.00	5,141.00	24.84	199.40	71.68	-2,114.72	4,369.21	4,184.84	3,966.59	218.25	19.174		
6,900.00	5,675.00	5,141.00	5,141.00	25.43	199.40	71.68	-2,114.72	4,369.21	4,093.54	3,875.24	218.30	18.752		
7,000.00	5,675.00	5,141.00	5,141.00	26.06	199.40	71.68	-2,114.72	4,369.21	4,002.66	3,784.30	218.37	18.330		
7,100.00	5,675.00	5,141.00	5,141.00	26.72	199.40	71.68	-2,114.72	4,369.21	3,912.23	3,693.78	218.45	17.909		
7,200.00	5,675.00	5,141.00	5,141.00	27.41	199.40	71.68	-2,114.72	4,369.21	3,822.27	3,603.72	218.56	17.489		
7,300.00	5,675.00	5,141.00	5,141.00	28.13	199.40	71.68	-2,114.72	4,369.21	3,732.83	3,514.14	218.68	17.070		
7,400.00	5,675.00	5,141.00	5,141.00	28.88	199.40	71.68	-2,114.72	4,369.21	3,643.93	3,425.09	218.83	16.652		
7,500.00	5,675.00	5,141.00	5,141.00	29.66	199.40	71.68	-2,114.72	4,369.21	3,555.62	3,336.61	219.01	16.235		
7,600.00	5,675.00	5,141.00	5,141.00	30.45	199.40	71.68	-2,114.72	4,369.21	3,467.95	3,248.73	219.22	15.820		
7,700.00	5,675.00	5,141.00	5,141.00	31.27	199.40	71.68	-2,114.72	4,369.21	3,380.96	3,161.50	219.46	15.406		
7,800.00	5,675.00	5,141.00	5,141.00	32.10	199.40	71.68	-2,114.72	4,369.21	3,294.71	3,074.98	219.73	14.994		
7,900.00	5,675.00	5,141.00	5,141.00	32.95	199.40	71.68	-2,114.72	4,369.21	3,209.25	2,989.21	220.04	14.585		
8,000.00	5,675.00	5,141.00	5,141.00	33.82	199.40	71.68	-2,114.72	4,369.21	3,124.66	2,904.28	220.39	14.178		
8,100.00	5,675.00	5,141.00	5,141.00	34.70	199.40	71.68	-2,114.72	4,369.21	3,041.01	2,820.23	220.78	13.774		
8,200.00	5,675.00	5,141.00	5,141.00	35.60	199.40	71.68	-2,114.72	4,369.21	2,958.37	2,737.16	221.22	13.373		
8,300.00	5,675.00	5,141.00	5,141.00	36.51	199.40	71.68	-2,114.72	4,369.21	2,876.84	2,655.14	221.70	12.976		
8,400.00	5,675.00	5,141.00	5,141.00	37.43	199.40	71.68	-2,114.72	4,369.21	2,796.50	2,574.27	222.24	12.584		
8,500.00	5,675.00	5,141.00	5,141.00	38.37	199.40	71.68	-2,114.72	4,369.21	2,717.47	2,494.64	222.82	12.196		
8,600.00	5,675.00	5,141.00	5,141.00	39.31	199.40	71.68	-2,114.72	4,369.21	2,639.86	2,416.39	223.47	11.813		
8,700.00	5,675.00	5,141.00	5,141.00	40.26	199.40	71.68	-2,114.72	4,369.21	2,563.80	2,339.63	224.17	11.437		
8,800.00	5,675.00	5,141.00	5,141.00	41.22	199.40	71.68	-2,114.72	4,369.21	2,489.44	2,264.50	224.94	11.067		
8,900.00	5,675.00	5,141.00	5,141.00	42.19	199.40	71.68	-2,114.72	4,369.21	2,416.92	2,191.16	225.77	10.705		
9,000.00	5,675.00	5,141.00	5,141.00	43.17	199.40	71.68	-2,114.72	4,369.21	2,346.43	2,119.77	226.66	10.352		
9,100.00	5,675.00	5,141.00	5,141.00	44.15	199.40	71.68	-2,114.72	4,369.21	2,278.15	2,050.53	227.62	10.009		
9,200.00	5,675.00	5,141.00	5,141.00	45.14	199.40	71.68	-2,114.72	4,369.21	2,212.28	1,983.64	228.64	9.676		
9,300.00	5,675.00	5,141.00	5,141.00	46.14	199.40	71.68	-2,114.72	4,369.21	2,149.05	1,919.32	229.73	9.355		
9,400.00	5,675.00	5,141.00	5,141.00	47.15	199.40	71.68	-2,114.72	4,369.21	2,088.69	1,857.81	230.88	9.047		
9,500.00	5,675.00	5,141.00	5,141.00	48.15	199.40	71.68	-2,114.72	4,369.21	2,031.46	1,799.38	232.09	8.753		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTYRE A FEDERAL #14 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 300-UNKNOWN												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Rule Assigned:		Distance	Minimum	Separation	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation Factor		
9,600.00	5,675.00	5,141.00	5,141.00	49.17	199.40	71.68	-2,114.72	4,369.21	1,977.64	1,744.30	233.35	8.475	
9,700.00	5,675.00	5,141.00	5,141.00	50.19	199.40	71.68	-2,114.72	4,369.21	1,927.51	1,692.85	234.66	8.214	
9,800.00	5,675.00	5,141.00	5,141.00	51.21	199.40	71.68	-2,114.72	4,369.21	1,881.36	1,645.36	236.00	7.972	
9,900.00	5,675.00	5,141.00	5,141.00	52.24	199.40	71.68	-2,114.72	4,369.21	1,839.49	1,602.11	237.38	7.749	
10,000.00	5,675.00	5,141.00	5,141.00	53.27	199.40	71.68	-2,114.72	4,369.21	1,802.21	1,563.44	238.77	7.548	
10,100.00	5,675.00	5,141.00	5,141.00	54.31	199.40	71.68	-2,114.72	4,369.21	1,769.79	1,529.63	240.16	7.369	
10,200.00	5,675.00	5,141.00	5,141.00	55.34	199.40	71.68	-2,114.72	4,369.21	1,742.52	1,500.98	241.55	7.214	
10,300.00	5,675.00	5,141.00	5,141.00	56.39	199.40	71.68	-2,114.72	4,369.21	1,720.64	1,477.75	242.90	7.084	
10,400.00	5,675.00	5,141.00	5,141.00	57.43	199.40	71.68	-2,114.72	4,369.21	1,704.36	1,460.16	244.20	6.979	
10,500.00	5,675.00	5,141.00	5,141.00	58.48	199.40	71.68	-2,114.72	4,369.21	1,693.83	1,448.39	245.44	6.901	
10,600.00	5,675.00	5,141.00	5,141.00	59.53	199.40	71.68	-2,114.72	4,369.21	1,689.16	1,442.57	246.60	6.850	
10,628.89	5,675.00	5,141.00	5,141.00	59.84	199.40	71.68	-2,114.72	4,369.21	1,688.92	1,442.00	246.91	6.840 CC, ES	
10,700.00	5,675.00	5,141.00	5,141.00	60.59	199.40	71.68	-2,114.72	4,369.21	1,690.41	1,442.76	247.66	6.826 SF	
10,800.00	5,675.00	5,141.00	5,141.00	61.64	199.40	71.68	-2,114.72	4,369.21	1,697.56	1,448.95	248.61	6.828	
10,900.00	5,675.00	5,141.00	5,141.00	62.70	199.40	71.68	-2,114.72	4,369.21	1,710.54	1,461.09	249.45	6.857	
11,000.00	5,675.00	5,141.00	5,141.00	63.77	199.40	71.68	-2,114.72	4,369.21	1,729.21	1,479.04	250.17	6.912	
11,100.00	5,675.00	5,141.00	5,141.00	64.83	199.40	71.68	-2,114.72	4,369.21	1,753.39	1,502.63	250.76	6.992	
11,200.00	5,675.00	5,141.00	5,141.00	65.90	199.40	71.68	-2,114.72	4,369.21	1,782.86	1,531.63	251.23	7.097	
11,300.00	5,675.00	5,141.00	5,141.00	66.96	199.40	71.68	-2,114.72	4,369.21	1,817.37	1,565.79	251.58	7.224	
11,400.00	5,675.00	5,141.00	5,141.00	68.03	199.40	71.68	-2,114.72	4,369.21	1,856.62	1,604.80	251.82	7.373	
11,431.20	5,675.00	5,141.00	5,141.00	68.37	199.40	71.68	-2,114.72	4,369.21	1,869.79	1,617.92	251.87	7.424	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTYRE B #9 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 532-INC-ONLY													0.00 usft
Rule Assigned:													Offset Well Error:
Warning													0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	160.59	-2,917.31	1,027.84	3,093.13				
100.00	100.00	82.00	82.00	0.29	0.85	160.59	-2,917.31	1,027.84	3,093.08	3,091.94	1.14	2,717.004	
200.00	200.00	182.00	182.00	0.65	1.89	160.59	-2,917.31	1,027.84	3,093.08	3,090.55	2.54	1,219.924	
300.00	300.00	282.00	282.00	1.00	2.93	160.59	-2,917.31	1,027.84	3,093.08	3,089.15	3.93	786.538	
400.00	399.98	381.98	381.98	1.35	3.97	-90.54	-2,917.31	1,027.84	3,093.10	3,087.78	5.32	581.514	
500.00	499.84	481.84	481.84	1.70	5.00	-90.64	-2,917.31	1,027.84	3,093.15	3,086.45	6.70	461.568	
600.00	599.45	581.45	581.45	2.05	6.50	-90.79	-2,917.31	1,027.84	3,093.26	3,084.72	8.55	361.981	
700.00	698.70	680.70	680.70	2.41	8.44	-91.02	-2,917.31	1,027.84	3,093.45	3,082.60	10.85	285.065	
740.39	738.66	720.22	720.21	2.56	9.22	-91.12	-2,916.50	1,027.84	3,092.81	3,081.03	11.77	262.680	
800.00	797.47	771.95	771.94	2.77	10.23	-91.28	-2,916.57	1,027.84	3,093.09	3,080.09	13.01	237.792	
900.00	895.62	858.34	858.33	3.14	11.93	-91.56	-2,916.97	1,027.84	3,094.02	3,078.94	15.07	205.245	
1,000.00	993.06	975.07	975.06	3.52	14.28	-92.02	-2,917.31	1,027.84	3,095.01	3,077.20	17.80	173.832	
1,100.00	1,089.87	1,071.89	1,071.87	3.91	16.26	-92.47	-2,917.31	1,027.84	3,096.02	3,075.85	20.17	153.493	
1,200.00	1,186.65	1,168.67	1,168.65	4.30	18.24	-92.92	-2,917.31	1,027.84	3,097.24	3,074.70	22.54	137.406	
1,300.00	1,283.44	1,265.46	1,265.44	4.69	20.22	-93.37	-2,917.31	1,027.84	3,098.66	3,073.75	24.91	124.374	
1,400.00	1,380.22	1,360.62	1,360.60	5.09	22.17	-93.81	-2,916.44	1,027.84	3,099.49	3,072.23	27.26	113.714	
1,500.00	1,477.00	1,454.54	1,454.52	5.49	24.09	-94.25	-2,916.54	1,027.84	3,101.42	3,071.84	29.58	104.864	
1,600.00	1,573.78	1,548.47	1,548.45	5.89	26.01	-94.68	-2,916.74	1,027.84	3,103.64	3,071.74	31.90	97.305	
1,700.00	1,670.56	1,642.42	1,642.39	6.29	27.93	-95.11	-2,917.03	1,027.84	3,106.15	3,071.93	34.22	90.776	
1,800.00	1,767.35	1,749.38	1,749.35	6.69	30.20	-95.61	-2,917.31	1,027.84	3,108.83	3,071.94	36.89	84.264	
1,900.00	1,864.13	1,846.16	1,846.13	7.10	32.42	-96.05	-2,917.31	1,027.84	3,111.47	3,071.96	39.51	78.745	
2,000.00	1,960.91	1,942.94	1,942.91	7.50	34.64	-96.50	-2,917.31	1,027.84	3,114.31	3,072.18	42.13	73.915	
2,100.00	2,057.69	2,031.14	2,031.10	7.90	36.66	-96.91	-2,916.07	1,027.84	3,116.25	3,071.69	44.56	69.938	
2,200.00	2,154.47	2,117.38	2,117.32	8.31	38.63	-97.31	-2,916.50	1,027.84	3,119.93	3,072.99	46.93	66.473	
2,300.00	2,251.26	2,233.32	2,233.26	8.71	41.31	-97.83	-2,917.31	1,027.84	3,124.04	3,074.02	50.02	62.454	
2,400.00	2,348.04	2,330.11	2,330.04	9.12	43.63	-98.27	-2,917.31	1,027.84	3,127.68	3,074.94	52.74	59.305	
2,500.00	2,444.82	2,426.89	2,426.82	9.52	45.94	-98.72	-2,917.31	1,027.84	3,131.51	3,076.06	55.46	56.468	
2,600.00	2,541.62	2,513.52	2,513.44	9.93	48.01	-93.63	-2,916.21	1,027.84	3,133.72	3,075.79	57.93	54.095	
2,699.99	2,638.44	2,599.14	2,599.05	10.33	50.06	-86.29	-2,916.70	1,027.84	3,134.21	3,073.83	60.38	51.910	
2,800.00	2,735.22	2,717.33	2,717.22	10.74	52.89	-86.20	-2,917.31	1,027.84	3,132.86	3,069.24	63.61	49.248	
2,900.00	2,832.01	2,814.11	2,814.01	11.14	55.21	-86.64	-2,917.31	1,027.84	3,131.24	3,064.90	66.34	47.199	
3,000.00	2,928.79	2,907.55	2,907.42	11.54	57.45	-87.09	-2,915.87	1,027.84	3,128.57	3,059.58	68.99	45.350	
3,100.00	3,025.57	2,991.15	2,991.02	11.95	59.46	-87.47	-2,916.18	1,027.84	3,127.67	3,056.27	71.39	43.808	
3,199.38	3,121.75	3,074.36	3,074.22	12.35	61.46	-87.85	-2,916.89	1,027.84	3,127.37	3,053.58	73.79	42.382	
3,200.00	3,122.35	3,074.89	3,074.74	12.35	61.47	-87.85	-2,916.90	1,027.84	3,127.37	3,053.56	73.81	42.373	
3,300.00	3,219.14	3,201.29	3,201.14	12.76	64.51	-88.43	-2,917.31	1,027.84	3,126.77	3,049.51	77.26	40.473	
3,400.00	3,315.92	3,298.07	3,297.92	13.16	66.84	-88.87	-2,917.31	1,027.84	3,126.15	3,046.16	79.99	39.083	
3,500.00	3,412.70	3,390.87	3,390.70	13.57	69.07	-89.31	-2,915.99	1,027.84	3,124.63	3,042.00	82.63	37.817	
3,534.00	3,445.61	3,420.37	3,420.20	13.70	69.78	-89.45	-2,916.05	1,027.84	3,124.60	3,041.13	83.47	37.433	
3,600.00	3,509.48	3,477.67	3,477.49	13.97	71.16	-89.71	-2,916.28	1,027.84	3,124.71	3,039.59	85.12	36.711	
3,700.00	3,606.27	3,564.58	3,564.39	14.38	73.25	-90.11	-2,916.91	1,027.84	3,125.29	3,037.68	87.61	35.673	
3,800.00	3,703.05	3,685.24	3,685.05	14.78	76.31	-90.66	-2,917.31	1,027.84	3,125.73	3,034.64	91.08	34.317	
3,900.00	3,799.83	3,782.03	3,781.83	15.19	78.83	-91.10	-2,917.31	1,027.84	3,126.13	3,032.12	94.01	33.254	
3,974.36	3,871.80	3,853.99	3,853.77	15.49	80.71	-91.45	-2,915.67	1,027.84	3,125.21	3,029.03	96.18	32.493	
4,000.00	3,896.61	3,875.87	3,875.65	15.60	81.28	-91.55	-2,915.69	1,027.84	3,125.40	3,028.54	96.86	32.269	
4,100.00	3,993.40	3,961.29	3,961.07	16.00	83.50	-91.94	-2,915.98	1,027.84	3,126.48	3,027.00	99.48	31.428	
4,200.00	4,090.18	4,046.83	4,046.59	16.41	85.73	-92.33	-2,916.65	1,027.84	3,128.11	3,026.00	102.11	30.635	
4,300.00	4,186.96	4,169.21	4,168.96	16.82	88.98	-92.89	-2,917.31	1,027.84	3,129.75	3,023.97	105.78	29.588	
4,400.00	4,283.74	4,266.00	4,265.74	17.23	91.61	-93.33	-2,917.31	1,027.84	3,131.16	3,022.35	108.81	28.777	
4,494.50	4,375.20	4,356.38	4,356.10	17.61	94.06	-93.77	-2,915.44	1,027.84	3,131.19	3,019.54	111.64	28.046	
4,500.00	4,380.53	4,360.99	4,360.71	17.63	94.19	-93.79	-2,915.44	1,027.84	3,131.28	3,019.49	111.79	28.010	
4,600.00	4,477.31	4,444.88	4,444.58	18.04	96.46	-93.42	-2,915.72	1,027.84	3,133.35	3,018.88	114.47	27.373	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTYRE B #9 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 532-INC-ONLY		Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned:				Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,700.00	4,575.17	4,529.83	4,529.52	18.43	98.77	-75.47	-2,916.45	1,027.84	3,132.70	3,015.55	117.15	26.741		
4,800.00	4,674.18	4,656.51	4,656.18	18.77	102.15	-36.77	-2,917.31	1,027.84	3,126.15	3,005.27	120.89	25.860		
4,900.00	4,773.25	4,755.58	4,755.25	19.07	104.74	4.69	-2,917.31	1,027.84	3,113.25	2,989.46	123.78	25.151		
5,000.00	4,871.30	4,842.94	4,842.58	19.33	107.03	25.72	-2,915.96	1,027.84	3,093.61	2,967.27	126.34	24.487		
5,100.00	4,967.25	4,923.50	4,923.13	19.57	109.14	36.55	-2,916.57	1,027.84	3,070.14	2,941.46	128.69	23.858		
5,200.00	5,060.05	5,042.43	5,042.05	19.79	112.20	43.79	-2,917.31	1,027.84	3,041.52	2,909.55	131.97	23.046		
5,300.00	5,148.68	5,131.07	5,130.68	20.00	114.43	49.43	-2,917.31	1,027.84	3,007.90	2,873.48	134.42	22.378		
5,400.00	5,232.18	5,214.56	5,214.18	20.19	116.54	54.46	-2,917.31	1,027.84	2,970.37	2,833.65	136.72	21.727		
5,500.00	5,309.62	5,292.01	5,291.62	20.38	118.49	59.27	-2,917.31	1,027.84	2,929.69	2,790.83	138.85	21.099		
5,600.00	5,380.17	5,362.56	5,362.17	20.57	120.27	64.00	-2,917.31	1,027.84	2,886.69	2,745.87	140.82	20.499		
5,700.00	5,443.04	5,425.43	5,425.04	20.77	121.85	68.66	-2,917.31	1,027.84	2,842.30	2,699.70	142.59	19.933		
5,799.99	5,497.55	5,479.93	5,479.55	20.98	123.23	73.17	-2,917.31	1,027.84	2,797.48	2,653.31	144.17	19.404		
5,900.00	5,547.55	5,529.94	5,529.55	21.24	124.49	74.18	-2,917.31	1,027.84	2,753.76	2,608.08	145.67	18.904		
5,999.99	5,597.55	5,579.93	5,579.55	21.54	125.75	75.14	-2,917.31	1,027.84	2,712.10	2,564.89	147.21	18.423		
6,100.00	5,639.98	5,622.36	5,621.98	21.86	126.82	80.37	-2,917.31	1,027.84	2,670.90	2,522.32	148.59	17.975		
6,200.00	5,666.06	5,648.44	5,648.06	22.21	127.48	85.44	-2,917.31	1,027.84	2,629.70	2,480.13	149.57	17.582		
6,299.99	5,675.00	5,657.39	5,657.00	22.54	127.70	89.94	-2,917.31	1,027.84	2,590.26	2,440.14	150.12	17.255		
6,400.00	5,675.00	5,657.39	5,657.00	22.90	127.70	90.00	-2,917.31	1,027.84	2,553.90	2,403.43	150.47	16.973		
6,500.00	5,675.00	5,657.39	5,657.00	23.32	127.70	90.00	-2,917.31	1,027.84	2,520.99	2,370.11	150.89	16.708		
6,600.00	5,675.00	5,657.39	5,657.00	23.78	127.70	90.00	-2,917.31	1,027.84	2,491.66	2,340.31	151.36	16.462		
6,700.00	5,675.00	5,657.39	5,657.00	24.29	127.70	90.00	-2,917.31	1,027.84	2,466.04	2,314.17	151.88	16.237		
6,800.00	5,675.00	5,657.39	5,657.00	24.84	127.70	90.00	-2,917.31	1,027.84	2,444.25	2,291.80	152.45	16.033		
6,900.00	5,675.00	5,657.39	5,657.00	25.43	127.70	90.00	-2,917.31	1,027.84	2,426.38	2,273.31	153.07	15.851		
7,000.00	5,675.00	5,657.39	5,657.00	26.06	127.70	90.00	-2,917.31	1,027.84	2,412.54	2,258.81	153.72	15.694		
7,100.00	5,675.00	5,657.39	5,657.00	26.72	127.70	90.00	-2,917.31	1,027.84	2,402.77	2,248.36	154.41	15.561		
7,200.00	5,675.00	5,657.39	5,657.00	27.41	127.70	90.00	-2,917.31	1,027.84	2,397.14	2,242.03	155.11	15.454		
7,285.08	5,675.00	5,657.39	5,657.00	28.03	127.70	90.00	-2,917.31	1,027.84	2,395.63	2,239.91	155.73	15.384	CC	
7,300.00	5,675.00	5,657.39	5,657.00	28.13	127.70	90.00	-2,917.31	1,027.84	2,395.68	2,239.85	155.83	15.374	ES	
7,400.00	5,675.00	5,657.39	5,657.00	28.88	127.70	90.00	-2,917.31	1,027.84	2,398.39	2,241.83	156.56	15.320		
7,500.00	5,675.00	5,657.39	5,657.00	29.66	127.70	90.00	-2,917.31	1,027.84	2,405.25	2,247.98	157.28	15.293	SF	
7,600.00	5,675.00	5,657.39	5,657.00	30.45	127.70	90.00	-2,917.31	1,027.84	2,416.24	2,258.25	157.99	15.294		
7,700.00	5,675.00	5,657.39	5,657.00	31.27	127.70	90.00	-2,917.31	1,027.84	2,431.30	2,272.61	158.69	15.321		
7,800.00	5,675.00	5,657.39	5,657.00	32.10	127.70	90.00	-2,917.31	1,027.84	2,450.35	2,290.98	159.36	15.376		
7,900.00	5,675.00	5,657.39	5,657.00	32.95	127.70	90.00	-2,917.31	1,027.84	2,473.29	2,313.28	160.01	15.457		
8,000.00	5,675.00	5,657.39	5,657.00	33.82	127.70	90.00	-2,917.31	1,027.84	2,500.03	2,339.40	160.63	15.564		
8,100.00	5,675.00	5,657.39	5,657.00	34.70	127.70	90.00	-2,917.31	1,027.84	2,530.44	2,369.23	161.22	15.696		
8,200.00	5,675.00	5,657.39	5,657.00	35.60	127.70	90.00	-2,917.31	1,027.84	2,564.40	2,402.63	161.77	15.852		
8,300.00	5,675.00	5,657.39	5,657.00	36.51	127.70	90.00	-2,917.31	1,027.84	2,601.75	2,439.47	162.28	16.032		
8,400.00	5,675.00	5,657.39	5,657.00	37.43	127.70	90.00	-2,917.31	1,027.84	2,642.36	2,479.60	162.76	16.234		
8,500.00	5,675.00	5,657.39	5,657.00	38.37	127.70	90.00	-2,917.31	1,027.84	2,686.09	2,522.88	163.21	16.458		
8,600.00	5,675.00	5,657.39	5,657.00	39.31	127.70	90.00	-2,917.31	1,027.84	2,732.77	2,569.16	163.62	16.702		
8,700.00	5,675.00	5,657.39	5,657.00	40.26	127.70	90.00	-2,917.31	1,027.84	2,782.27	2,618.28	163.99	16.966		
8,800.00	5,675.00	5,657.39	5,657.00	41.22	127.70	90.00	-2,917.31	1,027.84	2,834.44	2,670.10	164.34	17.248		
8,900.00	5,675.00	5,657.39	5,657.00	42.19	127.70	90.00	-2,917.31	1,027.84	2,889.12	2,724.47	164.65	17.547		
9,000.00	5,675.00	5,657.39	5,657.00	43.17	127.70	90.00	-2,917.31	1,027.84	2,946.18	2,781.25	164.93	17.863		
9,100.00	5,675.00	5,657.39	5,657.00	44.15	127.70	90.00	-2,917.31	1,027.84	3,005.49	2,840.31	165.18	18.195		
9,200.00	5,675.00	5,657.39	5,657.00	45.14	127.70	90.00	-2,917.31	1,027.84	3,066.91	2,901.50	165.41	18.541		
9,300.00	5,675.00	5,657.39	5,657.00	46.14	127.70	90.00	-2,917.31	1,027.84	3,130.33	2,964.71	165.62	18.901		
9,400.00	5,675.00	5,657.39	5,657.00	47.15	127.70	90.00	-2,917.31	1,027.84	3,195.61	3,029.81	165.80	19.273		
9,500.00	5,675.00	5,657.39	5,657.00	48.15	127.70	90.00	-2,917.31	1,027.84	3,262.65	3,096.68	165.97	19.658		
9,600.00	5,675.00	5,657.39	5,657.00	49.17	127.70	90.00	-2,917.31	1,027.84	3,331.35	3,165.23	166.11	20.054		
9,700.00	5,675.00	5,657.39	5,657.00	50.19	127.70	90.00	-2,917.31	1,027.84	3,401.60	3,235.35	166.25	20.461		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTYRE B #9 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 532-INC-ONLY													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Rule Assigned:		Distance		Minimum	Separation	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)			
9,800.00	5,675.00	5,657.39	5,657.00	51.21	127.70	90.00	-2,917.31	1,027.84	3,473.31	3,306.95	166.36	20.878		
9,900.00	5,675.00	5,657.39	5,657.00	52.24	127.70	90.00	-2,917.31	1,027.84	3,546.38	3,379.92	166.46	21.304		
10,000.00	5,675.00	5,657.39	5,657.00	53.27	127.70	90.00	-2,917.31	1,027.84	3,620.75	3,454.20	166.55	21.739		
10,100.00	5,675.00	5,657.39	5,657.00	54.31	127.70	90.00	-2,917.31	1,027.84	3,696.32	3,529.69	166.63	22.183		
10,200.00	5,675.00	5,657.39	5,657.00	55.34	127.70	90.00	-2,917.31	1,027.84	3,773.03	3,606.33	166.70	22.634		
10,300.00	5,675.00	5,657.39	5,657.00	56.39	127.70	90.00	-2,917.31	1,027.84	3,850.81	3,684.05	166.76	23.092		
10,400.00	5,675.00	5,657.39	5,657.00	57.43	127.70	90.00	-2,917.31	1,027.84	3,929.60	3,762.79	166.81	23.557		
10,500.00	5,675.00	5,657.39	5,657.00	58.48	127.70	90.00	-2,917.31	1,027.84	4,009.33	3,842.47	166.86	24.028		
10,600.00	5,675.00	5,657.39	5,657.00	59.53	127.70	90.00	-2,917.31	1,027.84	4,089.95	3,923.06	166.90	24.506		
10,700.00	5,675.00	5,657.39	5,657.00	60.59	127.70	90.00	-2,917.31	1,027.84	4,171.42	4,004.48	166.93	24.989		
10,800.00	5,675.00	5,657.39	5,657.00	61.64	127.70	90.00	-2,917.31	1,027.84	4,253.67	4,086.71	166.96	25.477		
10,900.00	5,675.00	5,657.39	5,657.00	62.70	127.70	90.00	-2,917.31	1,027.84	4,336.67	4,169.68	166.99	25.970		
11,000.00	5,675.00	5,657.39	5,657.00	63.77	127.70	90.00	-2,917.31	1,027.84	4,420.37	4,253.36	167.01	26.468		
11,100.00	5,675.00	5,657.39	5,657.00	64.83	127.70	90.00	-2,917.31	1,027.84	4,504.74	4,337.71	167.02	26.970		
11,200.00	5,675.00	5,657.39	5,657.00	65.90	127.70	90.00	-2,917.31	1,027.84	4,589.73	4,422.69	167.04	27.477		
11,300.00	5,675.00	5,657.39	5,657.00	66.96	127.70	90.00	-2,917.31	1,027.84	4,675.32	4,508.27	167.05	27.987		
11,400.00	5,675.00	5,657.39	5,657.00	68.03	127.70	90.00	-2,917.31	1,027.84	4,761.47	4,594.41	167.06	28.501		
11,431.20	5,675.00	5,657.39	5,657.00	68.37	127.70	90.00	-2,917.31	1,027.84	4,788.45	4,621.39	167.07	28.662		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTYRE E #8 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 407-INC-ONLY													Offset Well Error:
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)		
0.00	0.00	0.00	0.00	0.00	0.00	143.23	-2,914.36	2,178.11	3,638.38				
100.00	100.00	89.00	89.00	0.29	0.92	143.23	-2,914.36	2,178.11	3,638.36	3,637.16	1.20	3,021.544	
200.00	200.00	189.00	189.00	0.65	1.95	143.23	-2,914.36	2,178.11	3,638.36	3,635.77	2.59	1,402.955	
300.00	300.00	289.00	289.00	1.00	2.98	143.23	-2,914.36	2,178.11	3,638.36	3,634.38	3.98	913.571	
400.00	399.98	388.98	388.98	1.35	4.01	-107.89	-2,914.36	2,178.11	3,638.90	3,633.53	5.36	678.743	
500.00	499.84	488.84	488.84	1.70	5.94	-107.94	-2,914.36	2,178.11	3,640.51	3,632.87	7.63	476.890	
600.00	599.45	588.45	588.45	2.05	8.06	-108.02	-2,914.36	2,178.11	3,643.21	3,633.10	10.11	360.494	
700.00	698.70	675.56	675.55	2.41	9.91	-108.10	-2,913.75	2,178.11	3,646.55	3,634.23	12.32	296.015	
800.00	797.47	786.48	786.47	2.77	12.27	-108.26	-2,914.36	2,178.11	3,651.95	3,636.91	15.04	242.768	
900.00	895.62	884.64	884.62	3.14	14.36	-108.42	-2,914.36	2,178.11	3,658.06	3,640.56	17.50	209.000	
1,000.00	993.06	967.08	967.05	3.52	16.11	-108.56	-2,914.01	2,178.11	3,665.13	3,645.49	19.64	186.662	
1,100.00	1,089.87	1,078.90	1,078.87	3.91	18.49	-108.93	-2,914.36	2,178.11	3,673.65	3,651.25	22.40	164.016	
1,200.00	1,186.65	1,165.89	1,165.85	4.30	20.34	-109.25	-2,913.96	2,178.11	3,681.84	3,657.20	24.64	149.446	
1,300.00	1,283.44	1,272.48	1,272.44	4.69	22.77	-109.64	-2,914.36	2,178.11	3,690.76	3,663.32	27.45	134.467	
1,400.00	1,380.22	1,369.26	1,369.22	5.09	25.18	-110.00	-2,914.36	2,178.11	3,699.55	3,669.29	30.25	122.282	
1,500.00	1,477.00	1,466.04	1,466.00	5.49	27.60	-110.36	-2,914.36	2,178.11	3,708.48	3,675.42	33.06	112.166	
1,600.00	1,573.78	1,556.42	1,556.37	5.89	29.85	-110.70	-2,913.31	2,178.11	3,716.76	3,681.05	35.71	104.077	
1,700.00	1,670.56	1,644.81	1,644.75	6.29	32.06	-111.01	-2,913.64	2,178.11	3,726.27	3,687.96	38.31	97.263	
1,800.00	1,767.35	1,756.41	1,756.35	6.69	34.87	-111.41	-2,914.36	2,178.11	3,736.17	3,694.65	41.52	89.985	
1,900.00	1,864.13	1,853.20	1,853.13	7.10	37.59	-111.76	-2,914.36	2,178.11	3,745.69	3,701.06	44.63	83.920	
2,000.00	1,960.91	1,925.83	1,925.73	7.50	39.62	-112.03	-2,913.58	2,178.11	3,754.85	3,707.78	47.07	79.777	
2,100.00	2,057.69	2,046.81	2,046.69	7.90	43.03	-112.45	-2,914.36	2,178.11	3,765.17	3,714.29	50.88	74.006	
2,200.00	2,154.47	2,139.74	2,139.61	8.31	45.66	-112.79	-2,913.29	2,178.11	3,774.33	3,720.43	53.90	70.023	
2,300.00	2,251.26	2,214.18	2,214.03	8.71	47.77	-113.05	-2,913.70	2,178.11	3,784.82	3,728.42	56.40	67.108	
2,400.00	2,348.04	2,334.04	2,333.87	9.12	51.23	-113.47	-2,913.82	2,178.11	3,795.05	3,734.79	60.27	62.972	
2,500.00	2,444.82	2,434.01	2,433.82	9.52	54.18	-113.81	-2,914.36	2,178.11	3,805.82	3,742.21	63.61	59.832	
2,600.00	2,541.62	2,507.35	2,507.15	9.93	56.34	-108.55	-2,913.85	2,178.11	3,815.19	3,749.02	66.16	57.662	
2,699.99	2,638.44	2,627.65	2,627.44	10.33	59.73	-101.21	-2,914.36	2,178.11	3,822.11	3,752.16	69.95	54.641	
2,800.00	2,735.22	2,709.81	2,709.56	10.74	61.98	-100.90	-2,913.38	2,178.11	3,826.30	3,753.70	72.60	52.706	
2,900.00	2,832.01	2,821.27	2,821.01	11.14	64.98	-101.30	-2,914.36	2,178.11	3,831.98	3,755.98	76.00	50.419	
3,000.00	2,928.79	2,918.07	2,917.79	11.54	67.43	-101.66	-2,914.36	2,178.11	3,837.15	3,758.30	78.85	48.665	
3,100.00	3,025.57	3,014.85	3,014.57	11.95	70.08	-102.01	-2,914.36	2,178.11	3,842.47	3,760.57	81.90	46.914	
3,200.00	3,122.35	3,111.63	3,111.35	12.35	72.74	-102.37	-2,914.36	2,178.11	3,847.96	3,762.99	84.96	45.291	
3,300.00	3,219.14	3,203.06	3,202.76	12.76	75.25	-102.72	-2,912.78	2,178.11	3,852.51	3,764.64	87.87	43.843	
3,400.00	3,315.92	3,288.00	3,287.69	13.16	77.58	-103.03	-2,913.14	2,178.11	3,858.59	3,767.99	90.60	42.590	
3,500.00	3,412.70	3,373.06	3,372.73	13.57	79.92	-103.33	-2,913.89	2,178.11	3,865.13	3,771.80	93.33	41.414	
3,600.00	3,509.48	3,498.82	3,498.48	13.97	83.56	-103.78	-2,914.36	2,178.11	3,871.44	3,774.06	97.38	39.754	
3,700.00	3,606.27	3,579.08	3,578.72	14.38	85.95	-104.08	-2,913.43	2,178.11	3,877.11	3,776.95	100.16	38.708	
3,800.00	3,703.05	3,692.44	3,692.05	14.78	89.32	-104.48	-2,914.36	2,178.11	3,884.11	3,780.17	103.94	37.370	
3,900.00	3,799.83	3,789.22	3,788.83	15.19	92.20	-104.83	-2,914.36	2,178.11	3,890.67	3,783.46	107.21	36.289	
4,000.00	3,896.61	3,886.00	3,885.61	15.60	95.08	-105.17	-2,914.36	2,178.11	3,897.39	3,786.89	110.49	35.273	
4,100.00	3,993.40	3,970.79	3,970.35	16.00	97.60	-105.50	-2,912.36	2,178.11	3,902.96	3,789.55	113.41	34.414	
4,200.00	4,090.18	4,052.99	4,052.54	16.41	100.04	-105.78	-2,912.99	2,178.11	3,910.47	3,794.22	116.25	33.639	
4,300.00	4,186.96	4,176.45	4,175.96	16.82	103.69	-106.21	-2,914.36	2,178.11	3,918.43	3,798.12	120.30	32.571	
4,400.00	4,283.74	4,273.23	4,272.74	17.23	106.46	-106.55	-2,914.36	2,178.11	3,925.74	3,802.26	123.48	31.794	
4,500.00	4,380.53	4,370.01	4,369.53	17.63	109.24	-106.89	-2,914.36	2,178.11	3,933.20	3,806.55	126.65	31.056	
4,600.00	4,477.31	4,456.48	4,455.94	18.04	111.72	-106.48	-2,912.33	2,178.11	3,939.53	3,810.01	129.52	30.416	
4,700.00	4,575.17	4,539.90	4,539.35	18.43	114.11	-88.65	-2,912.93	2,178.11	3,943.38	3,811.10	132.29	29.810	
4,800.00	4,674.18	4,663.77	4,663.18	18.77	117.63	-50.08	-2,914.36	2,178.11	3,939.99	3,803.82	136.17	28.933	
4,900.00	4,773.25	4,762.84	4,762.25	19.07	120.36	-8.81	-2,914.36	2,178.11	3,928.14	3,788.93	139.21	28.217	
5,000.00	4,871.30	4,853.14	4,852.53	19.33	122.85	12.01	-2,913.10	2,178.11	3,907.96	3,765.99	141.97	27.527	
5,100.00	4,967.25	4,932.27	4,931.64	19.57	125.03	22.64	-2,913.63	2,178.11	3,881.63	3,737.24	144.39	26.883	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTYRE E #8 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 407-INC-ONLY													0.00 usft
Rule Assigned:													Offset Well Error:
0.00 usft													
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.00	5,060.05	5,020.00	5,019.35	19.79	127.44	29.50	-2,914.36	2,178.11	3,848.40	3,701.37	147.04	26.173	
5,300.00	5,148.68	5,020.00	5,019.35	20.00	127.44	34.49	-2,914.36	2,178.11	3,809.88	3,662.72	147.16	25.890	
5,400.00	5,232.18	5,020.00	5,019.35	20.19	127.44	38.73	-2,914.36	2,178.11	3,767.23	3,620.03	147.20	25.593	
5,500.00	5,309.62	5,020.00	5,019.35	20.38	127.44	42.67	-2,914.36	2,178.11	3,720.80	3,573.64	147.16	25.284	
5,600.00	5,380.17	5,020.00	5,019.35	20.57	127.44	46.55	-2,914.36	2,178.11	3,670.96	3,523.89	147.08	24.960	
5,700.00	5,443.04	5,020.00	5,019.35	20.77	127.44	50.48	-2,914.36	2,178.11	3,618.13	3,471.18	146.95	24.621	
5,799.99	5,497.55	5,020.00	5,019.35	20.98	127.44	54.56	-2,914.36	2,178.11	3,562.78	3,415.96	146.82	24.267	
5,900.00	5,547.55	5,020.00	5,019.35	21.24	127.44	54.61	-2,914.36	2,178.11	3,507.22	3,360.55	146.67	23.912	
5,999.99	5,597.55	5,020.00	5,019.35	21.54	127.44	54.61	-2,914.36	2,178.11	3,453.69	3,307.17	146.51	23.572	
6,100.00	5,639.98	5,020.00	5,019.35	21.86	127.44	60.15	-2,914.36	2,178.11	3,398.25	3,251.87	146.38	23.216	
6,200.00	5,666.06	5,020.00	5,019.35	22.21	127.44	66.96	-2,914.36	2,178.11	3,337.72	3,191.39	146.33	22.810	
6,299.99	5,675.00	5,020.00	5,019.35	22.54	127.44	74.83	-2,914.36	2,178.11	3,273.71	3,127.32	146.39	22.363	
6,400.00	5,675.00	5,020.00	5,019.35	22.90	127.44	74.94	-2,914.36	2,178.11	3,209.37	3,062.83	146.53	21.902	
6,500.00	5,675.00	5,020.00	5,019.35	23.32	127.44	74.94	-2,914.36	2,178.11	3,146.90	3,000.17	146.73	21.447	
6,600.00	5,675.00	5,020.00	5,019.35	23.78	127.44	74.94	-2,914.36	2,178.11	3,086.40	2,939.43	146.97	21.000	
6,700.00	5,675.00	5,020.00	5,019.35	24.29	127.44	74.94	-2,914.36	2,178.11	3,028.01	2,880.74	147.27	20.561	
6,800.00	5,675.00	5,020.00	5,019.35	24.84	127.44	74.94	-2,914.36	2,178.11	2,971.83	2,824.20	147.62	20.131	
6,900.00	5,675.00	5,020.00	5,019.35	25.43	127.44	74.94	-2,914.36	2,178.11	2,917.99	2,769.96	148.04	19.711	
7,000.00	5,675.00	5,020.00	5,019.35	26.06	127.44	74.94	-2,914.36	2,178.11	2,866.64	2,718.13	148.51	19.303	
7,100.00	5,675.00	5,020.00	5,019.35	26.72	127.44	74.94	-2,914.36	2,178.11	2,817.90	2,668.86	149.04	18.908	
7,200.00	5,675.00	5,020.00	5,019.35	27.41	127.44	74.94	-2,914.36	2,178.11	2,771.91	2,622.29	149.62	18.526	
7,300.00	5,675.00	5,020.00	5,019.35	28.13	127.44	74.94	-2,914.36	2,178.11	2,728.81	2,578.55	150.26	18.160	
7,400.00	5,675.00	5,020.00	5,019.35	28.88	127.44	74.94	-2,914.36	2,178.11	2,688.74	2,537.78	150.96	17.811	
7,500.00	5,675.00	5,020.00	5,019.35	29.66	127.44	74.94	-2,914.36	2,178.11	2,651.84	2,500.14	151.70	17.480	
7,600.00	5,675.00	5,020.00	5,019.35	30.45	127.44	74.94	-2,914.36	2,178.11	2,618.24	2,465.74	152.49	17.169	
7,700.00	5,675.00	5,020.00	5,019.35	31.27	127.44	74.94	-2,914.36	2,178.11	2,588.07	2,434.74	153.33	16.879	
7,800.00	5,675.00	5,020.00	5,019.35	32.10	127.44	74.94	-2,914.36	2,178.11	2,561.45	2,407.26	154.20	16.612	
7,900.00	5,675.00	5,020.00	5,019.35	32.95	127.44	74.94	-2,914.36	2,178.11	2,538.50	2,383.40	155.09	16.367	
8,000.00	5,675.00	5,020.00	5,019.35	33.82	127.44	74.94	-2,914.36	2,178.11	2,519.30	2,363.29	156.02	16.148	
8,100.00	5,675.00	5,020.00	5,019.35	34.70	127.44	74.94	-2,914.36	2,178.11	2,503.96	2,347.01	156.95	15.954	
8,200.00	5,675.00	5,020.00	5,019.35	35.60	127.44	74.94	-2,914.36	2,178.11	2,492.54	2,334.64	157.90	15.786	
8,300.00	5,675.00	5,020.00	5,019.35	36.51	127.44	74.94	-2,914.36	2,178.11	2,485.09	2,326.24	158.85	15.645	
8,400.00	5,675.00	5,020.00	5,019.35	37.43	127.44	74.94	-2,914.36	2,178.11	2,481.65	2,321.87	159.79	15.531	
8,435.36	5,675.00	5,020.00	5,019.35	37.76	127.44	74.94	-2,914.36	2,178.11	2,481.40	2,321.28	160.12	15.497	CC, ES
8,500.00	5,675.00	5,020.00	5,019.35	38.37	127.44	74.94	-2,914.36	2,178.11	2,482.24	2,321.53	160.72	15.445	
8,600.00	5,675.00	5,020.00	5,019.35	39.31	127.44	74.94	-2,914.36	2,178.11	2,486.86	2,325.23	161.63	15.386	
8,700.00	5,675.00	5,020.00	5,019.35	40.26	127.44	74.94	-2,914.36	2,178.11	2,495.47	2,332.96	162.51	15.356	
8,800.00	5,675.00	5,020.00	5,019.35	41.22	127.44	74.94	-2,914.36	2,178.11	2,508.05	2,344.69	163.36	15.353	SF
8,900.00	5,675.00	5,020.00	5,019.35	42.19	127.44	74.94	-2,914.36	2,178.11	2,524.53	2,360.35	164.18	15.377	
9,000.00	5,675.00	5,020.00	5,019.35	43.17	127.44	74.94	-2,914.36	2,178.11	2,544.83	2,379.88	164.96	15.427	
9,100.00	5,675.00	5,020.00	5,019.35	44.15	127.44	74.94	-2,914.36	2,178.11	2,568.87	2,403.18	165.69	15.504	
9,200.00	5,675.00	5,020.00	5,019.35	45.14	127.44	74.94	-2,914.36	2,178.11	2,596.54	2,430.16	166.38	15.606	
9,300.00	5,675.00	5,020.00	5,019.35	46.14	127.44	74.94	-2,914.36	2,178.11	2,627.73	2,460.70	167.03	15.732	
9,400.00	5,675.00	5,020.00	5,019.35	47.15	127.44	74.94	-2,914.36	2,178.11	2,662.31	2,494.69	167.62	15.883	
9,500.00	5,675.00	5,020.00	5,019.35	48.15	127.44	74.94	-2,914.36	2,178.11	2,700.15	2,531.98	168.17	16.056	
9,600.00	5,675.00	5,020.00	5,019.35	49.17	127.44	74.94	-2,914.36	2,178.11	2,741.12	2,572.44	168.68	16.251	
9,700.00	5,675.00	5,020.00	5,019.35	50.19	127.44	74.94	-2,914.36	2,178.11	2,785.08	2,615.95	169.14	16.467	
9,800.00	5,675.00	5,020.00	5,019.35	51.21	127.44	74.94	-2,914.36	2,178.11	2,831.89	2,662.34	169.55	16.702	
9,900.00	5,675.00	5,020.00	5,019.35	52.24	127.44	74.94	-2,914.36	2,178.11	2,881.41	2,711.49	169.93	16.957	
10,000.00	5,675.00	5,020.00	5,019.35	53.27	127.44	74.94	-2,914.36	2,178.11	2,933.51	2,763.25	170.26	17.230	
10,100.00	5,675.00	5,020.00	5,019.35	54.31	127.44	74.94	-2,914.36	2,178.11	2,988.04	2,817.48	170.56	17.519	
10,200.00	5,675.00	5,020.00	5,019.35	55.34	127.44	74.94	-2,914.36	2,178.11	3,044.88	2,874.06	170.82	17.825	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTYRE E #8 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 407-INC-ONLY													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre			Rule Assigned:			Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,300.00	5,675.00	5,020.00	5,019.35	56.39	127.44	74.94	-2,914.36	2,178.11	3,103.91	2,932.86	171.05	18.146		
10,400.00	5,675.00	5,020.00	5,019.35	57.43	127.44	74.94	-2,914.36	2,178.11	3,164.99	2,993.74	171.25	18.481		
10,500.00	5,675.00	5,020.00	5,019.35	58.48	127.44	74.94	-2,914.36	2,178.11	3,228.02	3,056.59	171.43	18.830		
10,600.00	5,675.00	5,020.00	5,019.35	59.53	127.44	74.94	-2,914.36	2,178.11	3,292.88	3,121.30	171.57	19.192		
10,700.00	5,675.00	5,020.00	5,019.35	60.59	127.44	74.94	-2,914.36	2,178.11	3,359.46	3,187.76	171.70	19.566		
10,800.00	5,675.00	5,020.00	5,019.35	61.64	127.44	74.94	-2,914.36	2,178.11	3,427.67	3,255.86	171.81	19.951		
10,900.00	5,675.00	5,020.00	5,019.35	62.70	127.44	74.94	-2,914.36	2,178.11	3,497.40	3,325.51	171.89	20.346		
11,000.00	5,675.00	5,020.00	5,019.35	63.77	127.44	74.94	-2,914.36	2,178.11	3,568.58	3,396.62	171.96	20.752		
11,100.00	5,675.00	5,020.00	5,019.35	64.83	127.44	74.94	-2,914.36	2,178.11	3,641.11	3,469.09	172.02	21.167		
11,200.00	5,675.00	5,020.00	5,019.35	65.90	127.44	74.94	-2,914.36	2,178.11	3,714.92	3,542.86	172.06	21.591		
11,300.00	5,675.00	5,020.00	5,019.35	66.96	127.44	74.94	-2,914.36	2,178.11	3,789.93	3,617.84	172.09	22.023		
11,400.00	5,675.00	5,020.00	5,019.35	68.03	127.44	74.94	-2,914.36	2,178.11	3,866.07	3,693.96	172.11	22.463		
11,431.20	5,675.00	5,020.00	5,019.35	68.37	127.44	74.94	-2,914.36	2,178.11	3,890.04	3,717.93	172.11	22.602		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTYRE E FEDERAL #5 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 417-INC-ONLY													0.00 usft
Rule Assigned:													Offset Well Error:
0.00 usft													
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	151.58	-2,915.89	1,577.97	3,315.56				
100.00	100.00	77.00	77.00	0.29	0.69	151.58	-2,915.89	1,577.97	3,315.48	3,314.50	0.98	3,383.712	
200.00	200.00	177.00	177.00	0.65	1.59	151.58	-2,915.89	1,577.97	3,315.48	3,313.24	2.24	1,481.195	
300.00	300.00	277.00	277.00	1.00	2.49	151.58	-2,915.89	1,577.97	3,315.48	3,311.98	3.50	948.112	
400.00	399.98	376.98	376.98	1.35	3.39	-99.54	-2,915.89	1,577.97	3,315.77	3,311.02	4.74	698.801	
500.00	499.84	476.84	476.84	1.70	4.93	-99.62	-2,915.89	1,577.97	3,316.64	3,310.02	6.62	500.659	
600.00	599.45	576.45	576.45	2.05	6.88	-99.74	-2,915.89	1,577.97	3,318.11	3,309.18	8.93	371.501	
700.00	698.70	669.39	669.39	2.41	8.71	-99.89	-2,915.61	1,577.97	3,319.97	3,308.85	11.11	298.720	
800.00	797.47	774.47	774.47	2.77	10.80	-100.11	-2,915.89	1,577.97	3,322.96	3,309.39	13.57	244.876	
900.00	895.62	872.63	872.62	3.14	12.87	-100.36	-2,915.89	1,577.97	3,326.41	3,310.40	16.01	207.773	
1,000.00	993.06	961.81	961.79	3.52	14.74	-100.62	-2,915.28	1,577.97	3,330.09	3,311.83	18.27	182.290	
1,100.00	1,089.87	1,045.27	1,045.25	3.91	16.50	-100.94	-2,915.71	1,577.97	3,335.38	3,314.97	20.41	163.403	
1,200.00	1,186.65	1,163.68	1,163.65	4.30	18.94	-101.44	-2,915.89	1,577.97	3,340.52	3,317.29	23.24	143.768	
1,300.00	1,283.44	1,246.18	1,246.15	4.69	20.62	-101.79	-2,915.56	1,577.97	3,345.51	3,320.19	25.31	132.162	
1,400.00	1,380.22	1,357.25	1,357.22	5.09	22.89	-102.26	-2,915.89	1,577.97	3,351.18	3,323.21	27.98	119.776	
1,500.00	1,477.00	1,453.09	1,453.06	5.49	24.85	-102.66	-2,915.40	1,577.97	3,356.37	3,326.03	30.33	110.846	
1,600.00	1,573.78	1,539.25	1,539.21	5.89	26.61	-103.02	-2,915.59	1,577.97	3,362.33	3,329.84	32.49	103.480	
1,700.00	1,670.56	1,647.60	1,647.56	6.29	29.04	-103.47	-2,915.89	1,577.97	3,368.53	3,333.21	35.32	95.383	
1,800.00	1,767.35	1,744.39	1,744.35	6.69	31.41	-103.88	-2,915.89	1,577.97	3,374.66	3,336.57	38.09	88.607	
1,900.00	1,864.13	1,836.94	1,836.89	7.10	33.67	-104.27	-2,915.02	1,577.97	3,380.25	3,339.50	40.75	82.946	
2,000.00	1,960.91	1,923.44	1,923.39	7.50	35.79	-104.62	-2,915.31	1,577.97	3,387.01	3,343.74	43.27	78.275	
2,100.00	2,057.69	2,034.75	2,034.69	7.90	38.65	-105.08	-2,915.89	1,577.97	3,394.12	3,347.59	46.53	72.939	
2,200.00	2,154.47	2,129.92	2,129.84	8.31	41.45	-105.48	-2,914.85	1,577.97	3,400.11	3,350.38	49.73	68.376	
2,300.00	2,251.26	2,198.71	2,198.62	8.71	43.46	-105.76	-2,915.24	1,577.97	3,407.56	3,355.42	52.14	65.353	
2,400.00	2,348.04	2,325.15	2,325.04	9.12	47.22	-106.26	-2,915.89	1,577.97	3,415.14	3,358.84	56.30	60.659	
2,500.00	2,444.82	2,412.92	2,412.78	9.52	49.84	-106.63	-2,914.52	1,577.97	3,421.39	3,362.07	59.32	57.673	
2,600.00	2,541.62	2,483.37	2,483.20	9.93	51.95	-101.41	-2,915.08	1,577.97	3,428.67	3,366.84	61.82	55.459	
2,699.99	2,638.44	2,615.62	2,615.44	10.33	55.77	-94.21	-2,915.89	1,577.97	3,432.66	3,366.61	66.05	51.970	
2,800.00	2,735.22	2,712.41	2,712.22	10.74	58.50	-93.99	-2,915.89	1,577.97	3,434.39	3,365.21	69.19	49.640	
2,900.00	2,832.01	2,800.60	2,800.38	11.14	60.99	-94.37	-2,913.98	1,577.97	3,434.79	3,362.71	72.08	47.654	
3,000.00	2,928.79	2,880.80	2,880.56	11.54	63.26	-94.70	-2,914.48	1,577.97	3,437.36	3,362.62	74.74	45.990	
3,100.00	3,025.57	3,002.85	3,002.57	11.95	66.65	-95.20	-2,915.89	1,577.97	3,440.64	3,362.09	78.55	43.804	
3,200.00	3,122.35	3,099.63	3,099.35	12.35	69.10	-95.60	-2,915.89	1,577.97	3,443.08	3,361.69	81.39	42.304	
3,300.00	3,219.14	3,196.41	3,196.14	12.76	71.54	-96.01	-2,915.89	1,577.97	3,445.71	3,361.48	84.23	40.906	
3,400.00	3,315.92	3,284.83	3,284.52	13.16	73.77	-96.39	-2,914.08	1,577.97	3,447.14	3,360.28	86.87	39.684	
3,500.00	3,412.70	3,368.17	3,367.85	13.57	75.87	-96.73	-2,914.56	1,577.97	3,450.57	3,361.20	89.37	38.611	
3,600.00	3,509.48	3,486.84	3,486.48	13.97	78.85	-97.21	-2,915.89	1,577.97	3,454.69	3,361.93	92.76	37.244	
3,700.00	3,606.27	3,583.62	3,583.27	14.38	81.09	-97.61	-2,915.89	1,577.97	3,458.04	3,362.64	95.40	36.248	
3,800.00	3,703.05	3,680.40	3,680.05	14.78	83.33	-98.01	-2,915.89	1,577.97	3,461.57	3,363.53	98.04	35.307	
3,900.00	3,799.83	3,777.12	3,776.75	15.19	85.57	-98.43	-2,914.28	1,577.97	3,464.08	3,363.40	100.68	34.406	
4,000.00	3,896.61	3,865.56	3,865.18	15.60	87.62	-98.79	-2,914.43	1,577.97	3,468.10	3,364.97	103.13	33.629	
4,100.00	3,993.40	3,954.08	3,953.69	16.00	89.67	-99.15	-2,914.86	1,577.97	3,472.52	3,366.95	105.58	32.891	
4,200.00	4,090.18	4,042.69	4,042.30	16.41	91.72	-99.51	-2,915.59	1,577.97	3,477.35	3,369.33	108.03	32.190	
4,300.00	4,186.96	4,164.36	4,163.96	16.82	94.53	-100.00	-2,915.89	1,577.97	3,481.91	3,370.65	111.25	31.297	
4,400.00	4,283.74	4,261.14	4,260.74	17.23	96.77	-100.39	-2,915.89	1,577.97	3,486.50	3,372.61	113.89	30.612	
4,500.00	4,380.53	4,353.07	4,352.66	17.63	98.90	-100.78	-2,914.63	1,577.97	3,490.38	3,373.96	116.42	29.981	
4,600.00	4,477.31	4,440.04	4,439.62	18.04	100.91	-100.39	-2,914.97	1,577.97	3,495.59	3,376.76	118.83	29.416	
4,700.00	4,575.17	4,552.61	4,552.17	18.43	103.52	-82.59	-2,915.89	1,577.97	3,497.43	3,375.60	121.83	28.708	
4,800.00	4,674.18	4,651.62	4,651.18	18.77	105.92	-43.92	-2,915.89	1,577.97	3,491.84	3,367.27	124.57	28.031	
4,900.00	4,773.25	4,750.69	4,750.25	19.07	108.31	-2.55	-2,915.89	1,577.97	3,479.42	3,352.14	127.27	27.338	
5,000.00	4,871.30	4,839.66	4,839.21	19.33	110.47	18.38	-2,914.85	1,577.97	3,459.54	3,329.84	129.69	26.675	
5,100.00	4,967.25	4,925.23	4,924.77	19.57	112.54	29.14	-2,915.35	1,577.97	3,434.28	3,302.27	132.01	26.016	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTYRE E FEDERAL #5 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft	
Survey Program: 417-INC-ONLY				Offset			Semi Major Axis		Offset Wellbore Centre		Rule Assigned:			Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
5,200.00	5,060.05	5,037.52	5,037.05	19.79	115.25	36.24	-2,915.89	1,577.97	3,402.80	3,267.84	134.96	25.214			
5,300.00	5,148.68	5,126.15	5,125.68	20.00	117.40	41.83	-2,915.89	1,577.97	3,365.34	3,228.03	137.31	24.509			
5,400.00	5,232.18	5,196.59	5,196.10	20.19	119.10	46.78	-2,915.07	1,577.97	3,322.26	3,183.05	139.21	23.866			
5,500.00	5,309.62	5,287.13	5,286.62	20.38	121.29	51.87	-2,915.89	1,577.97	3,275.95	3,134.37	141.58	23.138			
5,600.00	5,380.17	5,357.67	5,357.17	20.57	123.00	56.92	-2,915.89	1,577.97	3,225.52	3,082.05	143.47	22.483			
5,700.00	5,443.04	5,417.77	5,417.26	20.77	124.45	62.04	-2,915.24	1,577.97	3,171.92	3,026.82	145.10	21.861			
5,799.99	5,497.55	5,462.57	5,462.05	20.98	125.53	67.11	-2,915.39	1,577.97	3,117.21	2,970.85	146.36	21.298			
5,900.00	5,547.55	5,525.08	5,524.55	21.24	127.04	68.29	-2,915.89	1,577.97	3,062.88	2,914.79	148.09	20.683			
5,999.99	5,597.55	5,542.00	5,541.47	21.54	127.47	68.59	-2,915.89	1,577.97	3,009.88	2,861.12	148.75	20.234			
6,100.00	5,639.98	5,542.00	5,541.47	21.86	127.47	74.45	-2,915.89	1,577.97	2,956.81	2,807.82	148.99	19.846			
6,200.00	5,666.06	5,542.00	5,541.47	22.21	127.47	80.81	-2,915.89	1,577.97	2,902.21	2,752.97	149.24	19.447			
6,299.99	5,675.00	5,542.00	5,541.47	22.54	127.47	87.27	-2,915.89	1,577.97	2,847.71	2,698.20	149.51	19.047			
6,400.00	5,675.00	5,542.00	5,541.47	22.90	127.47	87.36	-2,915.89	1,577.97	2,795.06	2,645.24	149.82	18.656			
6,500.00	5,675.00	5,542.00	5,541.47	23.32	127.47	87.36	-2,915.89	1,577.97	2,745.06	2,594.86	150.19	18.277			
6,600.00	5,675.00	5,542.00	5,541.47	23.78	127.47	87.36	-2,915.89	1,577.97	2,697.83	2,547.20	150.63	17.911			
6,700.00	5,675.00	5,542.00	5,541.47	24.29	127.47	87.36	-2,915.89	1,577.97	2,653.53	2,502.41	151.12	17.559			
6,800.00	5,675.00	5,542.00	5,541.47	24.84	127.47	87.36	-2,915.89	1,577.97	2,612.32	2,460.64	151.67	17.223			
6,900.00	5,675.00	5,542.00	5,541.47	25.43	127.47	87.36	-2,915.89	1,577.97	2,574.33	2,422.04	152.28	16.905			
7,000.00	5,675.00	5,542.00	5,541.47	26.06	127.47	87.36	-2,915.89	1,577.97	2,539.71	2,386.76	152.95	16.605			
7,100.00	5,675.00	5,542.00	5,541.47	26.72	127.47	87.36	-2,915.89	1,577.97	2,508.60	2,354.94	153.66	16.326			
7,200.00	5,675.00	5,542.00	5,541.47	27.41	127.47	87.36	-2,915.89	1,577.97	2,481.14	2,326.72	154.42	16.068			
7,300.00	5,675.00	5,542.00	5,541.47	28.13	127.47	87.36	-2,915.89	1,577.97	2,457.44	2,302.22	155.21	15.833			
7,400.00	5,675.00	5,542.00	5,541.47	28.88	127.47	87.36	-2,915.89	1,577.97	2,437.61	2,281.57	156.04	15.622			
7,500.00	5,675.00	5,542.00	5,541.47	29.66	127.47	87.36	-2,915.89	1,577.97	2,421.76	2,264.87	156.88	15.437			
7,600.00	5,675.00	5,542.00	5,541.47	30.45	127.47	87.36	-2,915.89	1,577.97	2,409.95	2,252.21	157.74	15.278			
7,700.00	5,675.00	5,542.00	5,541.47	31.27	127.47	87.36	-2,915.89	1,577.97	2,402.25	2,243.64	158.61	15.146			
7,800.00	5,675.00	5,542.00	5,541.47	32.10	127.47	87.36	-2,915.89	1,577.97	2,398.70	2,239.23	159.47	15.042			
7,835.22	5,675.00	5,542.00	5,541.47	32.40	127.47	87.36	-2,915.89	1,577.97	2,398.44	2,238.67	159.77	15.011	CC, ES		
7,900.00	5,675.00	5,542.00	5,541.47	32.95	127.47	87.36	-2,915.89	1,577.97	2,399.32	2,239.00	160.32	14.966			
8,000.00	5,675.00	5,542.00	5,541.47	33.82	127.47	87.36	-2,915.89	1,577.97	2,404.10	2,242.94	161.15	14.918			
8,100.00	5,675.00	5,542.00	5,541.47	34.70	127.47	87.36	-2,915.89	1,577.97	2,413.02	2,251.06	161.96	14.899	SF		
8,200.00	5,675.00	5,542.00	5,541.47	35.60	127.47	87.36	-2,915.89	1,577.97	2,426.03	2,263.29	162.73	14.908			
8,300.00	5,675.00	5,542.00	5,541.47	36.51	127.47	87.36	-2,915.89	1,577.97	2,443.06	2,279.59	163.47	14.945			
8,400.00	5,675.00	5,542.00	5,541.47	37.43	127.47	87.36	-2,915.89	1,577.97	2,464.04	2,299.88	164.17	15.009			
8,500.00	5,675.00	5,542.00	5,541.47	38.37	127.47	87.36	-2,915.89	1,577.97	2,488.87	2,324.05	164.82	15.100			
8,600.00	5,675.00	5,542.00	5,541.47	39.31	127.47	87.36	-2,915.89	1,577.97	2,517.42	2,351.99	165.43	15.217			
8,700.00	5,675.00	5,542.00	5,541.47	40.26	127.47	87.36	-2,915.89	1,577.97	2,549.59	2,383.59	165.99	15.360			
8,800.00	5,675.00	5,542.00	5,541.47	41.22	127.47	87.36	-2,915.89	1,577.97	2,585.22	2,418.71	166.51	15.526			
8,900.00	5,675.00	5,542.00	5,541.47	42.19	127.47	87.36	-2,915.89	1,577.97	2,624.18	2,457.20	166.98	15.716			
9,000.00	5,675.00	5,542.00	5,541.47	43.17	127.47	87.36	-2,915.89	1,577.97	2,666.32	2,498.91	167.41	15.927			
9,100.00	5,675.00	5,542.00	5,541.47	44.15	127.47	87.36	-2,915.89	1,577.97	2,711.50	2,543.71	167.79	16.160			
9,200.00	5,675.00	5,542.00	5,541.47	45.14	127.47	87.36	-2,915.89	1,577.97	2,759.56	2,591.43	168.13	16.413			
9,300.00	5,675.00	5,542.00	5,541.47	46.14	127.47	87.36	-2,915.89	1,577.97	2,810.36	2,641.93	168.43	16.685			
9,400.00	5,675.00	5,542.00	5,541.47	47.15	127.47	87.36	-2,915.89	1,577.97	2,863.75	2,695.05	168.70	16.975			
9,500.00	5,675.00	5,542.00	5,541.47	48.15	127.47	87.36	-2,915.89	1,577.97	2,919.60	2,750.66	168.93	17.283			
9,600.00	5,675.00	5,542.00	5,541.47	49.17	127.47	87.36	-2,915.89	1,577.97	2,977.75	2,808.61	169.14	17.606			
9,700.00	5,675.00	5,542.00	5,541.47	50.19	127.47	87.36	-2,915.89	1,577.97	3,038.08	2,868.77	169.31	17.944			
9,800.00	5,675.00	5,542.00	5,541.47	51.21	127.47	87.36	-2,915.89	1,577.97	3,100.47	2,931.01	169.46	18.296			
9,900.00	5,675.00	5,542.00	5,541.47	52.24	127.47	87.36	-2,915.89	1,577.97	3,164.79	2,995.20	169.58	18.662			
10,000.00	5,675.00	5,542.00	5,541.47	53.27	127.47	87.36	-2,915.89	1,577.97	3,230.92	3,061.23	169.69	19.040			
10,100.00	5,675.00	5,542.00	5,541.47	54.31	127.47	87.36	-2,915.89	1,577.97	3,298.75	3,128.98	169.77	19.430			
10,200.00	5,675.00	5,542.00	5,541.47	55.34	127.47	87.36	-2,915.89	1,577.97	3,368.19	3,198.35	169.84	19.831			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTYRE E FEDERAL #5 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 417-INC-ONLY													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre			Rule Assigned:			Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,300.00	5,675.00	5,542.00	5,541.47	56.39	127.47	87.36	-2,915.89	1,577.97	3,439.14	3,269.25	169.89	20.243		
10,400.00	5,675.00	5,542.00	5,541.47	57.43	127.47	87.36	-2,915.89	1,577.97	3,511.50	3,341.57	169.93	20.664		
10,500.00	5,675.00	5,542.00	5,541.47	58.48	127.47	87.36	-2,915.89	1,577.97	3,585.19	3,415.23	169.96	21.094		
10,600.00	5,675.00	5,542.00	5,541.47	59.53	127.47	87.36	-2,915.89	1,577.97	3,660.13	3,490.15	169.98	21.533		
10,700.00	5,675.00	5,542.00	5,541.47	60.59	127.47	87.36	-2,915.89	1,577.97	3,736.24	3,566.26	169.99	21.979		
10,800.00	5,675.00	5,542.00	5,541.47	61.64	127.47	87.36	-2,915.89	1,577.97	3,813.46	3,643.47	169.99	22.434		
10,900.00	5,675.00	5,542.00	5,541.47	62.70	127.47	87.36	-2,915.89	1,577.97	3,891.71	3,721.73	169.98	22.895		
11,000.00	5,675.00	5,542.00	5,541.47	63.77	127.47	87.36	-2,915.89	1,577.97	3,970.94	3,800.97	169.97	23.363		
11,100.00	5,675.00	5,542.00	5,541.47	64.83	127.47	87.36	-2,915.89	1,577.97	4,051.09	3,881.14	169.95	23.837		
11,200.00	5,675.00	5,542.00	5,541.47	65.90	127.47	87.36	-2,915.89	1,577.97	4,132.11	3,962.18	169.93	24.316		
11,300.00	5,675.00	5,542.00	5,541.47	66.96	127.47	87.36	-2,915.89	1,577.97	4,213.94	4,044.03	169.90	24.802		
11,400.00	5,675.00	5,542.00	5,541.47	68.03	127.47	87.36	-2,915.89	1,577.97	4,296.54	4,126.66	169.88	25.292		
11,431.20	5,675.00	5,542.00	5,541.47	68.37	127.47	87.36	-2,915.89	1,577.97	4,322.45	4,152.59	169.87	25.446		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTYRE W D `C` #7 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 1465-MWD+IGRF													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,299.99	5,675.00	5,037.00	5,032.34	22.54	15.31	58.30	-1,572.72	4,875.78	4,994.30	4,959.55	34.75	143.740	
6,400.00	5,675.00	5,037.00	5,032.34	22.90	15.31	58.76	-1,572.72	4,875.78	4,897.50	4,862.75	34.74	140.956	
6,500.00	5,675.00	5,037.00	5,032.34	23.32	15.31	58.76	-1,572.72	4,875.78	4,800.84	4,766.09	34.75	138.166	
6,600.00	5,675.00	5,037.00	5,032.34	23.78	15.31	58.76	-1,572.72	4,875.78	4,704.32	4,669.57	34.75	135.358	
6,700.00	5,675.00	5,037.00	5,032.34	24.29	15.31	58.76	-1,572.72	4,875.78	4,607.95	4,573.18	34.77	132.532	
6,800.00	5,675.00	5,037.00	5,032.34	24.84	15.31	58.76	-1,572.72	4,875.78	4,511.74	4,476.95	34.79	129.689	
6,900.00	5,675.00	5,037.00	5,032.34	25.43	15.31	58.76	-1,572.72	4,875.78	4,415.70	4,380.88	34.82	126.826	
7,000.00	5,675.00	5,037.00	5,032.34	26.06	15.31	58.76	-1,572.72	4,875.78	4,319.83	4,284.98	34.85	123.943	
7,100.00	5,675.00	5,037.00	5,032.34	26.72	15.31	58.76	-1,572.72	4,875.78	4,224.16	4,189.26	34.90	121.041	
7,200.00	5,675.00	5,037.00	5,032.34	27.41	15.31	58.76	-1,572.72	4,875.78	4,128.69	4,093.74	34.95	118.118	
7,300.00	5,675.00	5,037.00	5,032.34	28.13	15.31	58.76	-1,572.72	4,875.78	4,033.44	3,998.42	35.02	115.173	
7,400.00	5,675.00	5,037.00	5,032.34	28.88	15.31	58.76	-1,572.72	4,875.78	3,938.43	3,903.33	35.10	112.207	
7,500.00	5,675.00	5,037.00	5,032.34	29.66	15.31	58.76	-1,572.72	4,875.78	3,843.67	3,808.48	35.19	109.218	
7,600.00	5,675.00	5,037.00	5,032.34	30.45	15.31	58.76	-1,572.72	4,875.78	3,749.19	3,713.89	35.30	106.208	
7,700.00	5,675.00	5,037.00	5,032.34	31.27	15.31	58.76	-1,572.72	4,875.78	3,654.99	3,619.57	35.43	103.174	
7,800.00	5,675.00	5,037.00	5,032.34	32.10	15.31	58.76	-1,572.72	4,875.78	3,561.12	3,525.55	35.57	100.118	
7,900.00	5,675.00	5,037.00	5,032.34	32.95	15.31	58.76	-1,572.72	4,875.78	3,467.58	3,431.85	35.73	97.039	
8,000.00	5,675.00	5,037.00	5,032.34	33.82	15.31	58.76	-1,572.72	4,875.78	3,374.42	3,338.50	35.92	93.938	
8,100.00	5,675.00	5,037.00	5,032.34	34.70	15.31	58.76	-1,572.72	4,875.78	3,281.66	3,245.52	36.14	90.817	
8,200.00	5,675.00	5,037.00	5,032.34	35.60	15.31	58.76	-1,572.72	4,875.78	3,189.33	3,152.96	36.38	87.675	
8,300.00	5,675.00	5,037.00	5,032.34	36.51	15.31	58.76	-1,572.72	4,875.78	3,097.49	3,060.84	36.65	84.514	
8,400.00	5,675.00	5,037.00	5,032.34	37.43	15.31	58.76	-1,572.72	4,875.78	3,006.16	2,969.20	36.96	81.337	
8,500.00	5,675.00	5,037.00	5,032.34	38.37	15.31	58.76	-1,572.72	4,875.78	2,915.40	2,878.10	37.31	78.147	
8,600.00	5,675.00	5,037.00	5,032.34	39.31	15.31	58.76	-1,572.72	4,875.78	2,825.27	2,787.57	37.70	74.947	
8,700.00	5,675.00	5,037.00	5,032.34	40.26	15.31	58.76	-1,572.72	4,875.78	2,735.82	2,697.69	38.13	71.741	
8,800.00	5,675.00	5,037.00	5,032.34	41.22	15.31	58.76	-1,572.72	4,875.78	2,647.13	2,608.51	38.62	68.535	
8,900.00	5,675.00	5,037.00	5,032.34	42.19	15.31	58.76	-1,572.72	4,875.78	2,559.27	2,520.10	39.17	65.334	
9,000.00	5,675.00	5,037.00	5,032.34	43.17	15.31	58.76	-1,572.72	4,875.78	2,472.34	2,432.56	39.78	62.146	
9,100.00	5,675.00	5,037.00	5,032.34	44.15	15.31	58.76	-1,572.72	4,875.78	2,386.43	2,345.97	40.46	58.979	
9,200.00	5,675.00	5,037.00	5,032.34	45.14	15.31	58.76	-1,572.72	4,875.78	2,301.66	2,260.44	41.22	55.841	
9,300.00	5,675.00	5,037.00	5,032.34	46.14	15.31	58.76	-1,572.72	4,875.78	2,218.15	2,176.09	42.06	52.743	
9,400.00	5,675.00	5,037.00	5,032.34	47.15	15.31	58.76	-1,572.72	4,875.78	2,136.06	2,093.08	42.98	49.696	
9,500.00	5,675.00	5,037.00	5,032.34	48.15	15.31	58.76	-1,572.72	4,875.78	2,055.56	2,011.56	44.01	46.711	
9,600.00	5,675.00	5,037.00	5,032.34	49.17	15.31	58.76	-1,572.72	4,875.78	1,976.85	1,931.72	45.13	43.803	
9,700.00	5,675.00	5,037.00	5,032.34	50.19	15.31	58.76	-1,572.72	4,875.78	1,900.13	1,853.77	46.36	40.983	
9,800.00	5,675.00	5,037.00	5,032.34	51.21	15.31	58.76	-1,572.72	4,875.78	1,825.67	1,777.96	47.71	38.265	
9,900.00	5,675.00	5,037.00	5,032.34	52.24	15.31	58.76	-1,572.72	4,875.78	1,753.75	1,704.58	49.17	35.664	
10,000.00	5,675.00	5,037.00	5,032.34	53.27	15.31	58.76	-1,572.72	4,875.78	1,684.70	1,633.95	50.75	33.193	
10,100.00	5,675.00	5,037.00	5,032.34	54.31	15.31	58.76	-1,572.72	4,875.78	1,618.89	1,566.44	52.45	30.865	
10,200.00	5,675.00	5,037.00	5,032.34	55.34	15.31	58.76	-1,572.72	4,875.78	1,556.72	1,502.47	54.25	28.693	
10,300.00	5,675.00	5,037.00	5,032.34	56.39	15.31	58.76	-1,572.72	4,875.78	1,498.65	1,442.50	56.15	26.689	
10,400.00	5,675.00	5,037.00	5,032.34	57.43	15.31	58.76	-1,572.72	4,875.78	1,445.17	1,387.05	58.13	24.863	
10,500.00	5,675.00	5,037.00	5,032.34	58.48	15.31	58.76	-1,572.72	4,875.78	1,396.82	1,336.67	60.15	23.224	
10,600.00	5,675.00	5,037.00	5,032.34	59.53	15.31	58.76	-1,572.72	4,875.78	1,354.14	1,291.96	62.18	21.779	
10,700.00	5,675.00	5,037.00	5,032.34	60.59	15.31	58.76	-1,572.72	4,875.78	1,317.67	1,253.50	64.17	20.535	
10,800.00	5,675.00	5,037.00	5,032.34	61.64	15.31	58.76	-1,572.72	4,875.78	1,287.96	1,221.89	66.07	19.493	
10,900.00	5,675.00	5,037.00	5,032.34	62.70	15.31	58.76	-1,572.72	4,875.78	1,265.47	1,197.64	67.83	18.657	
11,000.00	5,675.00	5,037.00	5,032.34	63.77	15.31	58.76	-1,572.72	4,875.78	1,250.59	1,181.21	69.38	18.024	
11,100.00	5,675.00	5,037.00	5,032.34	64.83	15.31	58.76	-1,572.72	4,875.78	1,243.61	1,172.92	70.69	17.592	
11,137.12	5,675.00	5,037.00	5,032.34	65.22	15.31	58.76	-1,572.72	4,875.78	1,243.06	1,171.95	71.11	17.482 CC, ES	
11,200.00	5,675.00	5,037.00	5,032.34	65.90	15.31	58.76	-1,572.72	4,875.78	1,244.64	1,172.93	71.71	17.356	
11,300.00	5,675.00	5,037.00	5,032.34	66.96	15.31	58.76	-1,572.72	4,875.78	1,253.68	1,181.25	72.43	17.309 SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design:OCHO_TESORO OFFSETS - MCINTYRE W D `C` #7 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 1465-MWD+IGRF												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		
11,400.00	5,675.00	5,037.00	5,032.34	68.03	15.31	58.76	-1,572.72	4,875.78	1,270.55	1,197.71	72.84	17.443	
11,431.20	5,675.00	5,037.00	5,032.34	68.37	15.31	58.76	-1,572.72	4,875.78	1,277.37	1,204.46	72.91	17.521	

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - MCINTYRE-FEDERAL A #4 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 300-UNKNOWN		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance				Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
6,700.00	5,675.00	5,661.00	5,661.00	24.29	220.16	90.00	-2,910.63	4,803.42	4,977.74	4,736.44	241.29	20.630		
6,800.00	5,675.00	5,661.00	5,661.00	24.84	220.16	90.00	-2,910.63	4,803.42	4,890.37	4,648.90	241.47	20.253		
6,900.00	5,675.00	5,661.00	5,661.00	25.43	220.16	90.00	-2,910.63	4,803.42	4,803.50	4,561.83	241.67	19.877		
7,000.00	5,675.00	5,661.00	5,661.00	26.06	220.16	90.00	-2,910.63	4,803.42	4,717.14	4,475.25	241.90	19.501		
7,100.00	5,675.00	5,661.00	5,661.00	26.72	220.16	90.00	-2,910.63	4,803.42	4,631.34	4,389.19	242.15	19.126		
7,200.00	5,675.00	5,661.00	5,661.00	27.41	220.16	90.00	-2,910.63	4,803.42	4,546.12	4,303.67	242.45	18.751		
7,300.00	5,675.00	5,661.00	5,661.00	28.13	220.16	90.00	-2,910.63	4,803.42	4,461.51	4,218.74	242.77	18.378		
7,400.00	5,675.00	5,661.00	5,661.00	28.88	220.16	90.00	-2,910.63	4,803.42	4,377.55	4,134.42	243.13	18.005		
7,500.00	5,675.00	5,661.00	5,661.00	29.66	220.16	90.00	-2,910.63	4,803.42	4,294.27	4,050.75	243.53	17.634		
7,600.00	5,675.00	5,661.00	5,661.00	30.45	220.16	90.00	-2,910.63	4,803.42	4,211.73	3,967.76	243.96	17.264		
7,700.00	5,675.00	5,661.00	5,661.00	31.27	220.16	90.00	-2,910.63	4,803.42	4,129.95	3,885.51	244.44	16.895		
7,800.00	5,675.00	5,661.00	5,661.00	32.10	220.16	90.00	-2,910.63	4,803.42	4,049.00	3,804.03	244.96	16.529		
7,900.00	5,675.00	5,661.00	5,661.00	32.95	220.16	90.00	-2,910.63	4,803.42	3,968.91	3,723.38	245.53	16.165		
8,000.00	5,675.00	5,661.00	5,661.00	33.82	220.16	90.00	-2,910.63	4,803.42	3,889.75	3,643.60	246.14	15.803		
8,100.00	5,675.00	5,661.00	5,661.00	34.70	220.16	90.00	-2,910.63	4,803.42	3,811.56	3,564.75	246.81	15.444		
8,200.00	5,675.00	5,661.00	5,661.00	35.60	220.16	90.00	-2,910.63	4,803.42	3,734.41	3,486.90	247.52	15.087		
8,300.00	5,675.00	5,661.00	5,661.00	36.51	220.16	90.00	-2,910.63	4,803.42	3,658.38	3,410.09	248.28	14.735		
8,400.00	5,675.00	5,661.00	5,661.00	37.43	220.16	90.00	-2,910.63	4,803.42	3,583.52	3,334.42	249.10	14.386		
8,500.00	5,675.00	5,661.00	5,661.00	38.37	220.16	90.00	-2,910.63	4,803.42	3,509.91	3,259.94	249.97	14.041		
8,600.00	5,675.00	5,661.00	5,661.00	39.31	220.16	90.00	-2,910.63	4,803.42	3,437.63	3,186.74	250.90	13.701		
8,700.00	5,675.00	5,661.00	5,661.00	40.26	220.16	90.00	-2,910.63	4,803.42	3,366.78	3,114.90	251.88	13.367		
8,800.00	5,675.00	5,661.00	5,661.00	41.22	220.16	90.00	-2,910.63	4,803.42	3,297.43	3,044.52	252.91	13.038		
8,900.00	5,675.00	5,661.00	5,661.00	42.19	220.16	90.00	-2,910.63	4,803.42	3,229.69	2,975.68	254.01	12.715		
9,000.00	5,675.00	5,661.00	5,661.00	43.17	220.16	90.00	-2,910.63	4,803.42	3,163.67	2,908.51	255.16	12.399		
9,100.00	5,675.00	5,661.00	5,661.00	44.15	220.16	90.00	-2,910.63	4,803.42	3,099.46	2,843.09	256.37	12.090		
9,200.00	5,675.00	5,661.00	5,661.00	45.14	220.16	90.00	-2,910.63	4,803.42	3,037.19	2,779.56	257.63	11.789		
9,300.00	5,675.00	5,661.00	5,661.00	46.14	220.16	90.00	-2,910.63	4,803.42	2,976.98	2,718.03	258.94	11.497		
9,400.00	5,675.00	5,661.00	5,661.00	47.15	220.16	90.00	-2,910.63	4,803.42	2,918.95	2,658.64	260.31	11.213		
9,500.00	5,675.00	5,661.00	5,661.00	48.15	220.16	90.00	-2,910.63	4,803.42	2,863.24	2,601.52	261.72	10.940		
9,600.00	5,675.00	5,661.00	5,661.00	49.17	220.16	90.00	-2,910.63	4,803.42	2,809.98	2,546.81	263.17	10.677		
9,700.00	5,675.00	5,661.00	5,661.00	50.19	220.16	90.00	-2,910.63	4,803.42	2,759.32	2,494.65	264.67	10.426		
9,800.00	5,675.00	5,661.00	5,661.00	51.21	220.16	90.00	-2,910.63	4,803.42	2,711.40	2,445.21	266.19	10.186		
9,900.00	5,675.00	5,661.00	5,661.00	52.24	220.16	90.00	-2,910.63	4,803.42	2,666.38	2,398.63	267.75	9.959		
10,000.00	5,675.00	5,661.00	5,661.00	53.27	220.16	90.00	-2,910.63	4,803.42	2,624.40	2,355.07	269.32	9.745		
10,100.00	5,675.00	5,661.00	5,661.00	54.31	220.16	90.00	-2,910.63	4,803.42	2,585.60	2,314.69	270.90	9.544		
10,200.00	5,675.00	5,661.00	5,661.00	55.34	220.16	90.00	-2,910.63	4,803.42	2,550.13	2,277.65	272.49	9.359		
10,300.00	5,675.00	5,661.00	5,661.00	56.39	220.16	90.00	-2,910.63	4,803.42	2,518.14	2,244.08	274.06	9.188		
10,400.00	5,675.00	5,661.00	5,661.00	57.43	220.16	90.00	-2,910.63	4,803.42	2,489.76	2,214.15	275.61	9.034		
10,500.00	5,675.00	5,661.00	5,661.00	58.48	220.16	90.00	-2,910.63	4,803.42	2,465.11	2,187.98	277.14	8.895		
10,600.00	5,675.00	5,661.00	5,661.00	59.53	220.16	90.00	-2,910.63	4,803.42	2,444.31	2,165.69	278.61	8.773		
10,700.00	5,675.00	5,661.00	5,661.00	60.59	220.16	90.00	-2,910.63	4,803.42	2,427.45	2,147.41	280.04	8.668		
10,800.00	5,675.00	5,661.00	5,661.00	61.64	220.16	90.00	-2,910.63	4,803.42	2,414.62	2,133.22	281.40	8.581		
10,900.00	5,675.00	5,661.00	5,661.00	62.70	220.16	90.00	-2,910.63	4,803.42	2,405.88	2,123.19	282.68	8.511		
11,000.00	5,675.00	5,661.00	5,661.00	63.77	220.16	90.00	-2,910.63	4,803.42	2,401.27	2,117.39	283.88	8.459		
11,060.67	5,675.00	5,661.00	5,661.00	64.41	220.16	90.00	-2,910.63	4,803.42	2,400.51	2,115.94	284.57	8.436 CC		
11,100.00	5,675.00	5,661.00	5,661.00	64.83	220.16	90.00	-2,910.63	4,803.42	2,400.83	2,115.84	284.99	8.424 ES		
11,200.00	5,675.00	5,661.00	5,661.00	65.90	220.16	90.00	-2,910.63	4,803.42	2,404.55	2,118.55	286.00	8.408 SF		
11,300.00	5,675.00	5,661.00	5,661.00	66.96	220.16	90.00	-2,910.63	4,803.42	2,412.41	2,125.51	286.90	8.409		
11,400.00	5,675.00	5,661.00	5,661.00	68.03	220.16	90.00	-2,910.63	4,803.42	2,424.37	2,136.68	287.69	8.427		
11,431.20	5,675.00	5,661.00	5,661.00	68.37	220.16	90.00	-2,910.63	4,803.42	2,428.94	2,141.01	287.92	8.436		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - THUNDER ROAD FEDERAL #7 - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 343-INC-ONLY													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
+N/-S (usft)	+E/-W (usft)												
0.00	0.00	10.00	10.00	0.00	0.10	82.37	387.97	2,895.66	2,921.54				
100.00	100.00	110.00	110.00	0.29	1.13	82.37	387.97	2,895.66	2,921.54	2,920.12	1.41	2,067.588	
200.00	200.00	210.00	210.00	0.65	2.15	82.37	387.97	2,895.66	2,921.54	2,918.74	2.80	1,045.145	
300.00	300.00	310.00	310.00	1.00	3.18	82.37	387.97	2,895.66	2,921.54	2,917.36	4.18	699.322	
400.00	399.98	409.98	409.98	1.35	4.83	-168.73	387.97	2,895.66	2,923.25	2,917.07	6.18	472.989	
500.00	499.84	509.84	509.84	1.70	6.79	-168.73	387.97	2,895.66	2,928.38	2,919.89	8.49	344.891	
600.00	599.45	610.66	610.65	2.05	8.77	-168.75	388.73	2,895.66	2,937.03	2,926.20	10.83	271.304	
700.00	698.70	711.71	711.70	2.41	10.76	-168.74	388.20	2,895.66	2,948.92	2,935.75	13.17	223.954	
800.00	797.47	807.49	807.47	2.77	12.55	-168.73	387.97	2,895.66	2,964.23	2,948.92	15.31	193.558	
900.00	895.62	905.64	905.62	3.14	14.34	-168.73	387.97	2,895.66	2,982.96	2,965.49	17.47	170.785	
1,000.00	993.06	1,004.04	1,004.02	3.52	16.14	-168.73	388.24	2,895.66	3,005.07	2,985.45	19.62	153.153	
1,100.00	1,089.87	1,099.90	1,099.87	3.91	17.90	-168.79	387.97	2,895.66	3,029.61	3,007.87	21.74	139.368	
1,200.00	1,186.65	1,196.68	1,196.65	4.30	19.75	-168.88	387.97	2,895.66	3,054.33	3,030.40	23.93	127.658	
1,300.00	1,283.44	1,294.62	1,294.59	4.69	21.61	-168.97	388.15	2,895.66	3,079.08	3,052.94	26.14	117.802	
1,400.00	1,380.22	1,390.25	1,390.22	5.09	23.46	-169.06	387.97	2,895.66	3,103.78	3,075.45	28.34	109.537	
1,500.00	1,477.00	1,487.03	1,487.00	5.49	25.36	-169.14	387.97	2,895.66	3,128.52	3,097.93	30.59	102.266	
1,600.00	1,573.78	1,585.86	1,585.83	5.89	27.31	-169.24	388.23	2,895.66	3,153.31	3,120.42	32.89	95.873	
1,700.00	1,670.56	1,680.60	1,680.56	6.29	29.21	-169.31	387.97	2,895.66	3,178.02	3,142.88	35.14	90.436	
1,800.00	1,767.35	1,777.38	1,777.35	6.69	31.18	-169.40	387.97	2,895.66	3,202.78	3,165.31	37.47	85.484	
1,900.00	1,864.13	1,874.85	1,874.81	7.10	33.16	-169.49	388.59	2,895.66	3,227.64	3,187.83	39.81	81.082	
2,000.00	1,960.91	1,973.26	1,973.21	7.50	35.17	-169.57	388.30	2,895.66	3,252.37	3,210.20	42.17	77.130	
2,100.00	2,057.69	2,067.74	2,067.69	7.90	37.10	-169.64	387.97	2,895.66	3,277.09	3,232.64	44.45	73.729	
2,200.00	2,154.47	2,164.52	2,164.47	8.31	39.07	-169.72	387.97	2,895.66	3,301.87	3,255.10	46.78	70.586	
2,300.00	2,251.26	2,262.82	2,262.76	8.71	41.08	-169.81	388.64	2,895.66	3,326.77	3,277.63	49.14	67.701	
2,400.00	2,348.04	2,362.30	2,362.24	9.12	43.11	-169.88	388.11	2,895.66	3,351.48	3,299.96	51.53	65.045	
2,500.00	2,444.82	2,454.88	2,454.82	9.52	45.00	-169.95	387.97	2,895.66	3,376.26	3,322.49	53.77	62.790	
2,600.00	2,541.62	2,551.69	2,551.62	9.93	46.97	-164.20	387.97	2,895.66	3,400.81	3,344.71	56.10	60.616	
2,699.99	2,638.44	2,648.50	2,648.44	10.33	48.95	-156.16	387.97	2,895.66	3,424.41	3,365.97	58.44	58.599	
2,800.00	2,735.22	2,745.29	2,745.22	10.74	50.93	-155.67	387.97	2,895.66	3,447.45	3,386.68	60.77	56.726	
2,900.00	2,832.01	2,842.73	2,842.65	11.14	52.92	-155.86	389.23	2,895.66	3,470.73	3,407.61	63.12	54.983	
3,000.00	2,928.79	2,940.51	2,940.43	11.54	54.91	-156.02	389.04	2,895.66	3,493.80	3,428.32	65.48	53.356	
3,100.00	3,025.57	3,038.33	3,038.25	11.95	56.91	-156.19	388.70	2,895.66	3,516.86	3,449.02	67.84	51.840	
3,200.00	3,122.35	3,136.20	3,136.12	12.35	58.91	-156.34	388.19	2,895.66	3,539.93	3,469.73	70.20	50.426	
3,300.00	3,219.14	3,229.22	3,229.14	12.76	60.85	-156.49	387.97	2,895.66	3,563.07	3,490.56	72.50	49.144	
3,400.00	3,315.92	3,326.01	3,325.92	13.16	62.90	-156.65	387.97	2,895.66	3,586.27	3,511.36	74.91	47.873	
3,500.00	3,412.70	3,425.42	3,425.32	13.57	65.01	-156.83	388.58	2,895.66	3,609.62	3,532.23	77.38	46.648	
3,600.00	3,509.48	3,525.70	3,525.59	13.97	67.13	-156.98	387.94	2,895.66	3,632.76	3,552.89	79.87	45.485	
3,700.00	3,606.27	3,616.37	3,616.27	14.38	68.91	-157.12	387.97	2,895.66	3,656.04	3,574.03	82.00	44.583	
3,800.00	3,703.05	3,713.15	3,713.05	14.78	70.82	-157.27	387.97	2,895.66	3,679.35	3,595.07	84.27	43.660	
3,900.00	3,799.83	3,811.90	3,811.78	15.19	72.76	-157.44	388.84	2,895.66	3,702.85	3,616.27	86.58	42.769	
4,000.00	3,896.61	3,911.65	3,911.52	15.60	74.72	-157.58	388.38	2,895.66	3,726.12	3,637.21	88.91	41.911	
4,100.00	3,993.40	4,003.52	4,003.40	16.00	76.51	-157.72	387.97	2,895.66	3,749.41	3,658.36	91.05	41.182	
4,200.00	4,090.18	4,100.31	4,100.18	16.41	78.34	-157.86	387.97	2,895.66	3,772.81	3,679.57	93.24	40.463	
4,300.00	4,186.96	4,197.25	4,197.12	16.82	80.18	-158.01	388.45	2,895.66	3,796.33	3,700.89	95.44	39.777	
4,400.00	4,283.74	4,295.57	4,295.44	17.23	82.04	-158.15	388.34	2,895.66	3,819.76	3,722.09	97.67	39.110	
4,500.00	4,380.53	4,393.95	4,393.81	17.63	83.91	-158.29	388.03	2,895.66	3,843.16	3,743.27	99.90	38.472	
4,600.00	4,477.31	4,487.45	4,487.31	18.04	85.79	-157.65	387.97	2,895.66	3,866.62	3,764.47	102.14	37.855	
4,700.00	4,575.17	4,585.31	4,585.17	18.43	87.79	-139.42	387.97	2,895.66	3,884.39	3,779.89	104.50	37.172	
4,800.00	4,674.18	4,685.65	4,685.51	18.77	89.84	-100.91	388.66	2,895.66	3,892.07	3,785.18	106.90	36.410	
4,900.00	4,773.25	4,787.32	4,787.18	19.07	91.92	-60.25	388.35	2,895.66	3,889.22	3,779.92	109.30	35.583	
5,000.00	4,871.30	4,881.44	4,881.30	19.33	93.86	-40.56	387.97	2,895.66	3,876.08	3,764.54	111.54	34.751	
5,100.00	4,967.25	4,977.39	4,977.25	19.57	95.90	-31.65	387.97	2,895.66	3,852.92	3,739.07	113.85	33.843	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - THUNDER ROAD FEDERAL #7 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 343-INC-ONLY													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.00	5,060.05	5,070.19	5,070.05	19.79	97.86	-27.16	387.97	2,895.66	3,819.91	3,703.85	116.06	32.912	
5,300.00	5,148.68	5,161.91	5,161.75	20.00	99.80	-24.84	388.78	2,895.66	3,777.64	3,659.40	118.23	31.951	
5,400.00	5,232.18	5,248.55	5,248.38	20.19	101.64	-23.80	388.34	2,895.66	3,726.08	3,605.82	120.27	30.981	
5,500.00	5,309.62	5,319.79	5,319.62	20.38	103.13	-23.64	387.97	2,895.66	3,666.13	3,544.21	121.93	30.069	
5,600.00	5,380.17	5,390.34	5,390.17	20.57	104.57	-24.33	387.97	2,895.66	3,598.55	3,475.04	123.51	29.135	
5,700.00	5,443.04	5,453.21	5,453.04	20.77	105.86	-25.89	387.97	2,895.66	3,523.99	3,399.07	124.92	28.211	
5,799.99	5,497.55	5,507.86	5,507.69	20.98	106.97	-28.54	388.88	2,895.66	3,443.53	3,317.39	126.13	27.301	
5,900.00	5,547.55	5,559.87	5,559.70	21.24	108.04	-29.24	388.81	2,895.66	3,360.02	3,232.74	127.28	26.399	
5,999.99	5,597.55	5,611.87	5,611.69	21.54	109.10	-29.93	388.63	2,895.66	3,276.66	3,148.23	128.43	25.513	
6,100.00	5,639.98	5,656.00	5,655.82	21.86	110.00	-40.80	388.39	2,895.66	3,189.78	3,060.35	129.43	24.645	
6,200.00	5,666.06	5,683.13	5,682.94	22.21	110.56	-60.35	388.20	2,895.66	3,097.39	2,967.33	130.06	23.815	
6,299.99	5,675.00	5,692.43	5,692.24	22.54	110.75	-90.02	388.13	2,895.66	3,002.39	2,872.06	130.32	23.038	
6,400.00	5,675.00	5,692.43	5,692.24	22.90	110.75	-90.46	388.13	2,895.66	2,907.17	2,776.77	130.40	22.294	
6,500.00	5,675.00	5,692.42	5,692.24	23.32	110.75	-90.46	388.13	2,895.66	2,812.30	2,681.81	130.49	21.551	
6,600.00	5,675.00	5,692.42	5,692.23	23.78	110.75	-90.46	388.13	2,895.66	2,717.80	2,587.20	130.60	20.809	
6,700.00	5,675.00	5,692.42	5,692.23	24.29	110.75	-90.46	388.13	2,895.66	2,623.71	2,492.97	130.74	20.069	
6,800.00	5,675.00	5,692.42	5,692.23	24.84	110.75	-90.46	388.13	2,895.66	2,530.07	2,399.17	130.89	19.329	
6,900.00	5,675.00	5,692.41	5,692.23	25.43	110.75	-90.46	388.13	2,895.66	2,436.93	2,305.85	131.08	18.592	
7,000.00	5,675.00	5,692.41	5,692.22	26.06	110.75	-90.46	388.13	2,895.66	2,344.36	2,213.07	131.29	17.856	
7,100.00	5,675.00	5,692.41	5,692.22	26.72	110.75	-90.46	388.13	2,895.66	2,252.43	2,120.88	131.55	17.123	
7,200.00	5,675.00	5,692.41	5,692.22	27.41	110.75	-90.46	388.13	2,895.66	2,161.21	2,029.37	131.84	16.392	
7,300.00	5,675.00	5,692.40	5,692.22	28.13	110.75	-90.46	388.13	2,895.66	2,070.80	1,938.62	132.19	15.666	
7,400.00	5,675.00	5,692.40	5,692.21	28.88	110.75	-90.46	388.13	2,895.66	1,981.32	1,848.73	132.59	14.943	
7,500.00	5,675.00	5,692.40	5,692.21	29.66	110.75	-90.46	388.13	2,895.66	1,892.89	1,759.82	133.06	14.226	
7,600.00	5,675.00	5,692.40	5,692.21	30.45	110.75	-90.46	388.13	2,895.66	1,805.66	1,672.05	133.61	13.515	
7,700.00	5,675.00	5,692.39	5,692.21	31.27	110.75	-90.46	388.13	2,895.66	1,719.83	1,585.58	134.25	12.811	
7,800.00	5,675.00	5,692.39	5,692.20	32.10	110.75	-90.46	388.13	2,895.66	1,635.61	1,500.63	134.98	12.117	
7,900.00	5,675.00	5,692.39	5,692.20	32.95	110.75	-90.46	388.13	2,895.66	1,553.26	1,417.42	135.83	11.435	
8,000.00	5,675.00	5,692.39	5,692.20	33.82	110.75	-90.46	388.13	2,895.66	1,473.09	1,336.28	136.81	10.767	
8,100.00	5,675.00	5,692.38	5,692.20	34.70	110.75	-90.46	388.13	2,895.66	1,395.49	1,257.56	137.94	10.117	
8,200.00	5,675.00	5,692.38	5,692.19	35.60	110.74	-90.46	388.13	2,895.66	1,320.91	1,181.69	139.21	9.488	
8,300.00	5,675.00	5,692.38	5,692.19	36.51	110.74	-90.46	388.13	2,895.66	1,249.88	1,109.22	140.66	8.886	
8,400.00	5,675.00	5,692.38	5,692.19	37.43	110.74	-90.46	388.13	2,895.66	1,183.05	1,040.79	142.26	8.316	
8,500.00	5,675.00	5,692.37	5,692.19	38.37	110.74	-90.46	388.13	2,895.66	1,121.16	977.14	144.02	7.785	
8,600.00	5,675.00	5,692.37	5,692.18	39.31	110.74	-90.46	388.13	2,895.66	1,065.08	919.17	145.91	7.300	
8,700.00	5,675.00	5,692.37	5,692.18	40.26	110.74	-90.46	388.13	2,895.66	1,015.77	867.89	147.88	6.869	
8,800.00	5,675.00	5,692.37	5,692.18	41.22	110.74	-90.45	388.13	2,895.66	974.26	824.40	149.86	6.501	
8,900.00	5,675.00	5,692.36	5,692.18	42.19	110.74	-90.45	388.13	2,895.66	941.59	789.83	151.76	6.204	
9,000.00	5,675.00	5,692.36	5,692.17	43.17	110.74	-90.45	388.13	2,895.66	918.69	765.23	153.46	5.987	
9,100.00	5,675.00	5,692.36	5,692.17	44.15	110.74	-90.45	388.13	2,895.66	906.30	751.45	154.85	5.853	
9,163.01	5,675.00	5,692.36	5,692.17	44.78	110.74	-90.45	388.13	2,895.66	904.11	748.58	155.52	5.813 CC, ES	
9,200.00	5,675.00	5,692.36	5,692.17	45.14	110.74	-90.45	388.13	2,895.66	904.86	749.02	155.84	5.806 SF	
9,300.00	5,675.00	5,692.35	5,692.17	46.14	110.74	-90.45	388.13	2,895.66	914.43	758.04	156.39	5.847	
9,400.00	5,675.00	5,692.35	5,692.16	47.15	110.74	-90.45	388.13	2,895.66	934.65	778.15	156.50	5.972	
9,500.00	5,675.00	5,692.35	5,692.16	48.15	110.74	-90.45	388.13	2,895.66	964.87	808.65	156.22	6.176	
9,600.00	5,675.00	5,692.35	5,692.16	49.17	110.74	-90.45	388.13	2,895.66	1,004.18	848.54	155.63	6.452	
9,700.00	5,675.00	5,692.34	5,692.16	50.19	110.74	-90.45	388.13	2,895.66	1,051.55	896.73	154.82	6.792	
9,800.00	5,675.00	5,692.34	5,692.15	51.21	110.74	-90.45	388.13	2,895.66	1,105.97	952.10	153.87	7.188	
9,900.00	5,675.00	5,692.34	5,692.15	52.24	110.74	-90.45	388.13	2,895.66	1,166.43	1,013.59	152.84	7.631	
10,000.00	5,675.00	5,692.34	5,692.15	53.27	110.74	-90.45	388.13	2,895.66	1,232.06	1,080.26	151.80	8.116	
10,100.00	5,675.00	5,692.33	5,692.15	54.31	110.74	-90.45	388.13	2,895.66	1,302.06	1,151.29	150.77	8.636	
10,200.00	5,675.00	5,692.33	5,692.14	55.34	110.74	-90.45	388.13	2,895.66	1,375.77	1,226.00	149.78	9.185	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - THUNDER ROAD FEDERAL #7 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 343-INC-ONLY		Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned:				Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
10,300.00	5,675.00	5,692.33	5,692.14	56.39	110.74	-90.45	388.13	2,895.66	1,452.64	1,303.80	148.84	9.760		
10,400.00	5,675.00	5,692.33	5,692.14	57.43	110.74	-90.45	388.13	2,895.66	1,532.17	1,384.21	147.96	10.355		
10,500.00	5,675.00	5,692.32	5,692.14	58.48	110.74	-90.45	388.13	2,895.66	1,613.99	1,466.84	147.15	10.969		
10,600.00	5,675.00	5,692.32	5,692.13	59.53	110.74	-90.45	388.13	2,895.66	1,697.75	1,551.35	146.39	11.597		
10,700.00	5,675.00	5,692.32	5,692.13	60.59	110.74	-90.45	388.13	2,895.66	1,783.18	1,637.48	145.70	12.239		
10,800.00	5,675.00	5,692.32	5,692.13	61.64	110.74	-90.45	388.13	2,895.66	1,870.06	1,725.00	145.06	12.891		
10,900.00	5,675.00	5,692.31	5,692.13	62.70	110.74	-90.45	388.13	2,895.66	1,958.20	1,813.72	144.48	13.553		
11,000.00	5,675.00	5,692.31	5,692.12	63.77	110.74	-90.45	388.13	2,895.66	2,047.42	1,903.47	143.95	14.223		
11,100.00	5,675.00	5,692.31	5,692.12	64.83	110.74	-90.45	388.13	2,895.66	2,137.60	1,994.14	143.46	14.901		
11,200.00	5,675.00	5,692.31	5,692.12	65.90	110.74	-90.45	388.13	2,895.66	2,228.62	2,085.61	143.01	15.584		
11,300.00	5,675.00	5,692.30	5,692.12	66.96	110.74	-90.45	388.13	2,895.66	2,320.37	2,177.77	142.60	16.272		
11,400.00	5,675.00	5,692.30	5,692.11	68.03	110.74	-90.45	388.13	2,895.66	2,412.78	2,270.56	142.22	16.965		
11,431.20	5,675.00	5,692.30	5,692.11	68.37	110.74	-90.45	388.13	2,895.66	2,441.73	2,299.62	142.11	17.182		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - THUNDER ROAD FEDERAL #8 - Wellbore #1 - Wellbore #1														Offset Site Error:	0.00 usft
Survey Program: 313-INC-ONLY														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning		
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
0.00	0.00	1.00	1.00	0.00	0.01	108.35	-958.24	2,889.71	3,044.45						
100.00	100.00	101.00	101.00	0.29	0.90	108.35	-958.24	2,889.71	3,044.45	3,043.26	1.18	2,570.134			
200.00	200.00	201.00	201.00	0.65	1.79	108.35	-958.24	2,889.71	3,044.45	3,042.01	2.43	1,251.879			
300.00	300.00	301.00	301.00	1.00	2.68	108.35	-958.24	2,889.71	3,044.45	3,040.77	3.68	827.463			
400.00	399.98	400.98	400.98	1.35	4.57	-142.76	-958.24	2,889.71	3,045.83	3,039.91	5.92	514.280			
500.00	499.84	500.76	500.76	1.70	6.60	-142.77	-957.84	2,889.71	3,049.88	3,041.58	8.30	367.554			
600.00	599.45	598.19	598.18	2.05	8.58	-142.78	-957.96	2,889.71	3,056.87	3,046.23	10.63	287.529			
700.00	698.70	699.71	699.70	2.41	10.66	-142.80	-958.24	2,889.71	3,066.69	3,053.62	13.07	234.679			
800.00	797.47	798.47	798.47	2.77	12.75	-142.82	-958.24	2,889.71	3,079.20	3,063.68	15.52	198.389			
900.00	895.62	893.12	893.10	3.14	14.76	-142.85	-957.49	2,889.71	3,094.29	3,076.40	17.89	172.962			
1,000.00	993.06	984.70	984.67	3.52	16.70	-142.85	-958.12	2,889.71	3,112.59	3,092.39	20.20	154.119			
1,100.00	1,089.87	1,090.90	1,090.87	3.91	18.80	-143.08	-958.24	2,889.71	3,132.82	3,110.15	22.67	138.202			
1,200.00	1,186.65	1,186.52	1,186.49	4.30	20.69	-143.35	-957.74	2,889.71	3,153.06	3,128.15	24.91	126.567			
1,300.00	1,283.44	1,279.86	1,279.82	4.69	22.52	-143.61	-958.04	2,889.71	3,173.60	3,146.49	27.11	117.051			
1,400.00	1,380.22	1,381.26	1,381.22	5.09	24.62	-143.88	-958.24	2,889.71	3,194.18	3,164.60	29.58	107.994			
1,500.00	1,477.00	1,478.04	1,478.00	5.49	26.68	-144.14	-958.24	2,889.71	3,214.77	3,182.77	32.00	100.463			
1,600.00	1,573.78	1,574.82	1,574.78	5.89	28.73	-144.40	-958.24	2,889.71	3,235.42	3,201.00	34.42	93.992			
1,700.00	1,670.56	1,670.23	1,670.18	6.29	30.76	-144.67	-957.36	2,889.71	3,255.90	3,219.09	36.82	88.437			
1,800.00	1,767.35	1,765.15	1,765.10	6.69	32.77	-144.91	-957.61	2,889.71	3,276.75	3,237.55	39.20	83.590			
1,900.00	1,864.13	1,860.12	1,860.07	7.10	34.79	-145.15	-958.07	2,889.71	3,297.72	3,256.13	41.59	79.300			
2,000.00	1,960.91	1,961.97	1,961.91	7.50	37.01	-145.40	-958.24	2,889.71	3,318.66	3,274.48	44.18	75.115			
2,100.00	2,057.69	2,056.98	2,056.92	7.90	39.11	-145.65	-957.49	2,889.71	3,339.43	3,292.78	46.65	71.589			
2,200.00	2,154.47	2,148.02	2,147.94	8.31	41.12	-145.87	-958.00	2,889.71	3,360.58	3,311.56	49.02	68.549			
2,300.00	2,251.26	2,252.33	2,252.26	8.71	43.29	-146.12	-958.24	2,889.71	3,381.71	3,330.14	51.57	65.577			
2,400.00	2,348.04	2,348.97	2,348.89	9.12	45.27	-146.37	-957.48	2,889.71	3,402.65	3,348.74	53.91	63.113			
2,500.00	2,444.82	2,441.99	2,441.91	9.52	47.17	-146.59	-957.72	2,889.71	3,423.90	3,367.71	56.18	60.940			
2,600.00	2,541.62	2,542.72	2,542.62	9.93	49.23	-141.11	-958.24	2,889.71	3,444.69	3,386.08	58.62	58.768			
2,699.99	2,638.44	2,639.53	2,639.44	10.33	51.21	-133.37	-958.24	2,889.71	3,463.32	3,402.35	60.97	56.806			
2,800.00	2,735.22	2,736.32	2,736.22	10.74	53.19	-133.02	-958.24	2,889.71	3,480.74	3,417.42	63.32	54.969			
2,900.00	2,832.01	2,831.09	2,830.99	11.14	55.12	-133.32	-957.63	2,889.71	3,498.13	3,432.49	65.64	53.297			
3,000.00	2,928.79	2,925.84	2,925.74	11.54	57.06	-133.60	-958.02	2,889.71	3,515.82	3,447.87	67.95	51.743			
3,100.00	3,025.57	3,026.68	3,026.57	11.95	59.12	-133.90	-958.24	2,889.71	3,533.56	3,463.17	70.39	50.201			
3,200.00	3,122.35	3,123.46	3,123.35	12.35	61.10	-134.19	-958.24	2,889.71	3,551.35	3,478.60	72.74	48.820			
3,300.00	3,219.14	3,218.80	3,218.68	12.76	63.05	-134.49	-957.39	2,889.71	3,569.06	3,493.99	75.07	47.544			
3,400.00	3,315.92	3,312.90	3,312.77	13.16	64.98	-134.75	-957.77	2,889.71	3,587.10	3,509.73	77.37	46.364			
3,500.00	3,412.70	3,413.83	3,413.70	13.57	67.04	-135.04	-958.24	2,889.71	3,605.24	3,525.43	79.81	45.173			
3,600.00	3,509.48	3,510.61	3,510.48	13.97	69.02	-135.31	-958.24	2,889.71	3,623.37	3,541.21	82.17	44.099			
3,700.00	3,606.27	3,607.27	3,607.13	14.38	70.99	-135.60	-957.51	2,889.71	3,641.46	3,556.94	84.52	43.085			
3,800.00	3,703.05	3,702.29	3,702.16	14.78	72.94	-135.86	-957.66	2,889.71	3,659.79	3,572.95	86.84	42.146			
3,900.00	3,799.83	3,797.40	3,797.26	15.19	74.88	-136.12	-958.08	2,889.71	3,678.25	3,589.09	89.15	41.257			
4,000.00	3,896.61	3,897.76	3,897.61	15.60	76.99	-136.39	-958.24	2,889.71	3,696.73	3,605.09	91.64	40.338			
4,100.00	3,993.40	3,994.54	3,994.40	16.00	79.05	-136.66	-958.24	2,889.71	3,715.27	3,621.20	94.08	39.492			
4,200.00	4,090.18	4,088.76	4,088.61	16.41	81.06	-136.92	-957.67	2,889.71	3,733.80	3,637.35	96.45	38.711			
4,300.00	4,186.96	4,188.12	4,187.96	16.82	83.18	-137.18	-958.24	2,889.71	3,752.58	3,653.63	98.95	37.923			
4,400.00	4,283.74	4,284.90	4,284.74	17.23	85.32	-137.43	-958.24	2,889.71	3,771.35	3,669.89	101.46	37.170			
4,500.00	4,380.53	4,380.75	4,380.58	17.63	87.43	-137.70	-957.52	2,889.71	3,790.09	3,686.14	103.95	36.459			
4,600.00	4,477.31	4,475.06	4,474.89	18.04	89.52	-137.19	-957.91	2,889.71	3,809.05	3,702.64	106.41	35.796			
4,700.00	4,575.17	4,576.35	4,576.17	18.43	91.80	-119.37	-958.24	2,889.71	3,822.37	3,713.31	109.06	35.047			
4,800.00	4,674.18	4,675.36	4,675.18	18.77	94.07	-80.98	-958.24	2,889.71	3,825.50	3,713.82	111.69	34.252			
4,900.00	4,773.25	4,771.97	4,771.77	19.07	96.29	-40.20	-957.50	2,889.71	3,818.34	3,704.12	114.22	33.430			
5,000.00	4,871.30	4,872.50	4,872.30	19.33	98.59	-20.11	-958.24	2,889.71	3,801.22	3,684.40	116.81	32.541			
5,100.00	4,967.25	4,968.45	4,968.25	19.57	100.71	-10.50	-958.24	2,889.71	3,774.03	3,654.83	119.20	31.660			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - THUNDER ROAD FEDERAL #8 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 313-INC-ONLY													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,200.00	5,060.05	5,060.62	5,060.41	19.79	102.75	-4.98	-957.30	2,889.71	3,737.05	3,615.57	121.49	30.761		
5,300.00	5,148.68	5,146.88	5,146.65	20.00	104.66	-1.18	-957.66	2,889.71	3,690.94	3,567.33	123.61	29.860		
5,400.00	5,232.18	5,233.41	5,233.18	20.19	106.54	1.84	-958.24	2,889.71	3,636.06	3,510.38	125.68	28.931		
5,500.00	5,309.62	5,310.85	5,310.62	20.38	108.12	4.59	-958.24	2,889.71	3,572.93	3,445.51	127.42	28.040		
5,600.00	5,380.17	5,381.40	5,381.17	20.57	109.56	7.44	-958.24	2,889.71	3,502.32	3,373.32	129.00	27.150		
5,700.00	5,443.04	5,443.11	5,442.87	20.77	110.82	10.70	-957.55	2,889.71	3,424.91	3,294.55	130.36	26.272		
5,799.99	5,497.55	5,496.48	5,496.24	20.98	111.91	14.86	-957.76	2,889.71	3,341.79	3,210.25	131.53	25.407		
5,900.00	5,547.55	5,545.45	5,545.20	21.24	112.91	15.30	-958.09	2,889.71	3,256.00	3,123.40	132.59	24.556		
5,999.99	5,597.55	5,598.80	5,598.55	21.54	113.98	15.74	-958.24	2,889.71	3,170.25	3,036.53	133.72	23.708		
6,100.00	5,639.98	5,641.23	5,640.98	21.86	114.81	22.85	-958.24	2,889.71	3,080.73	2,946.12	134.62	22.885		
6,200.00	5,666.06	5,667.31	5,667.06	22.21	115.32	40.40	-958.24	2,889.71	2,985.36	2,850.19	135.16	22.087		
6,299.99	5,675.00	5,676.25	5,676.00	22.54	115.49	89.11	-958.24	2,889.71	2,887.03	2,751.68	135.36	21.329		
6,400.00	5,675.00	5,676.25	5,676.00	22.90	115.49	90.00	-958.24	2,889.71	2,788.24	2,652.87	135.37	20.597		
6,500.00	5,675.00	5,676.25	5,676.00	23.32	115.49	90.00	-958.24	2,889.71	2,689.55	2,554.17	135.39	19.866		
6,600.00	5,675.00	5,676.25	5,676.00	23.78	115.49	90.00	-958.24	2,889.71	2,590.97	2,455.56	135.41	19.134		
6,700.00	5,675.00	5,676.25	5,676.00	24.29	115.49	90.00	-958.24	2,889.71	2,492.49	2,357.06	135.44	18.403		
6,800.00	5,675.00	5,676.25	5,676.00	24.84	115.49	90.00	-958.24	2,889.71	2,394.15	2,258.67	135.47	17.673		
6,900.00	5,675.00	5,676.25	5,676.00	25.43	115.49	90.00	-958.24	2,889.71	2,295.94	2,160.42	135.52	16.942		
7,000.00	5,675.00	5,676.25	5,676.00	26.06	115.49	90.00	-958.24	2,889.71	2,197.90	2,062.33	135.57	16.212		
7,100.00	5,675.00	5,676.25	5,676.00	26.72	115.49	90.00	-958.24	2,889.71	2,100.04	1,964.40	135.64	15.483		
7,200.00	5,675.00	5,676.25	5,676.00	27.41	115.49	90.00	-958.24	2,889.71	2,002.39	1,866.68	135.72	14.754		
7,300.00	5,675.00	5,676.25	5,676.00	28.13	115.49	90.00	-958.24	2,889.71	1,904.99	1,769.18	135.81	14.026		
7,400.00	5,675.00	5,676.25	5,676.00	28.88	115.49	90.00	-958.24	2,889.71	1,807.87	1,671.94	135.93	13.300		
7,500.00	5,675.00	5,676.25	5,676.00	29.66	115.49	90.00	-958.24	2,889.71	1,711.09	1,575.01	136.08	12.574		
7,600.00	5,675.00	5,676.25	5,676.00	30.45	115.49	90.00	-958.24	2,889.71	1,614.69	1,478.43	136.26	11.850		
7,700.00	5,675.00	5,676.25	5,676.00	31.27	115.49	90.00	-958.24	2,889.71	1,518.76	1,382.28	136.49	11.128		
7,800.00	5,675.00	5,676.25	5,676.00	32.10	115.49	90.00	-958.24	2,889.71	1,423.39	1,286.63	136.76	10.408		
7,900.00	5,675.00	5,676.25	5,676.00	32.95	115.49	90.00	-958.24	2,889.71	1,328.71	1,191.60	137.11	9.691		
8,000.00	5,675.00	5,676.25	5,676.00	33.82	115.49	90.00	-958.24	2,889.71	1,234.86	1,097.31	137.55	8.978		
8,100.00	5,675.00	5,676.25	5,676.00	34.70	115.49	90.00	-958.24	2,889.71	1,142.05	1,003.95	138.11	8.269		
8,200.00	5,675.00	5,676.25	5,676.00	35.60	115.49	90.00	-958.24	2,889.71	1,050.57	911.76	138.81	7.568		
8,300.00	5,675.00	5,676.25	5,676.00	36.51	115.49	90.00	-958.24	2,889.71	960.79	821.06	139.72	6.876		
8,400.00	5,675.00	5,676.25	5,676.00	37.43	115.49	90.00	-958.24	2,889.71	873.23	732.33	140.90	6.198		
8,500.00	5,675.00	5,676.25	5,676.00	38.37	115.49	90.00	-958.24	2,889.71	788.63	646.22	142.41	5.538		
8,600.00	5,675.00	5,676.25	5,676.00	39.31	115.49	90.00	-958.24	2,889.71	708.06	563.70	144.36	4.905		
8,700.00	5,675.00	5,676.25	5,676.00	40.26	115.49	90.00	-958.24	2,889.71	633.05	486.24	146.82	4.312		
8,800.00	5,675.00	5,676.25	5,676.00	41.22	115.49	90.00	-958.24	2,889.71	565.84	416.01	149.82	3.777		
8,900.00	5,675.00	5,676.25	5,676.00	42.19	115.49	90.00	-958.24	2,889.71	509.49	356.24	153.25	3.325		
9,000.00	5,675.00	5,676.25	5,676.00	43.17	115.49	90.00	-958.24	2,889.71	467.97	311.29	156.67	2.987		
9,100.00	5,675.00	5,676.25	5,676.00	44.15	115.49	90.00	-958.24	2,889.71	445.43	286.08	159.34	2.795		
9,152.94	5,675.00	5,676.25	5,676.00	44.68	115.49	90.00	-958.24	2,889.71	442.27	282.10	160.17	2.761 CC, ES, SF		
9,200.00	5,675.00	5,676.25	5,676.00	45.14	115.49	90.00	-958.24	2,889.71	444.77	284.28	160.48	2.771		
9,300.00	5,675.00	5,676.25	5,676.00	46.14	115.49	90.00	-958.24	2,889.71	466.08	306.19	159.89	2.915		
9,400.00	5,675.00	5,676.25	5,676.00	47.15	115.49	90.00	-958.24	2,889.71	506.60	348.54	158.06	3.205		
9,500.00	5,675.00	5,676.25	5,676.00	48.15	115.49	90.00	-958.24	2,889.71	562.19	406.49	155.69	3.611		
9,600.00	5,675.00	5,676.25	5,676.00	49.17	115.49	90.00	-958.24	2,889.71	628.86	475.54	153.32	4.102		
9,700.00	5,675.00	5,676.25	5,676.00	50.19	115.49	90.00	-958.24	2,889.71	703.47	552.30	151.17	4.654		
9,800.00	5,675.00	5,676.25	5,676.00	51.21	115.49	90.00	-958.24	2,889.71	783.76	634.43	149.33	5.248		
9,900.00	5,675.00	5,676.25	5,676.00	52.24	115.49	90.00	-958.24	2,889.71	868.16	720.37	147.79	5.874		
10,000.00	5,675.00	5,676.25	5,676.00	53.27	115.49	90.00	-958.24	2,889.71	955.57	809.05	146.52	6.522		
10,100.00	5,675.00	5,676.25	5,676.00	54.31	115.49	90.00	-958.24	2,889.71	1,045.24	899.78	145.46	7.186		
10,200.00	5,675.00	5,676.25	5,676.00	55.34	115.49	90.00	-958.24	2,889.71	1,136.63	992.06	144.58	7.862		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - THUNDER ROAD FEDERAL #8 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 313-INC-ONLY												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum		Separation	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)			
							+N-S (usft)	+E-W (usft)					
10,300.00	5,675.00	5,676.25	5,676.00	56.39	115.49	90.00	-958.24	2,889.71	1,229.37	1,085.53	143.84	8.547	
10,400.00	5,675.00	5,676.25	5,676.00	57.43	115.49	90.00	-958.24	2,889.71	1,323.16	1,179.94	143.22	9.238	
10,500.00	5,675.00	5,676.25	5,676.00	58.48	115.49	90.00	-958.24	2,889.71	1,417.80	1,275.10	142.70	9.935	
10,600.00	5,675.00	5,676.25	5,676.00	59.53	115.49	90.00	-958.24	2,889.71	1,513.14	1,370.88	142.26	10.636	
10,700.00	5,675.00	5,676.25	5,676.00	60.59	115.49	90.00	-958.24	2,889.71	1,609.04	1,467.15	141.88	11.341	
10,800.00	5,675.00	5,676.25	5,676.00	61.64	115.49	90.00	-958.24	2,889.71	1,705.40	1,563.84	141.56	12.047	
10,900.00	5,675.00	5,676.25	5,676.00	62.70	115.49	90.00	-958.24	2,889.71	1,802.17	1,660.89	141.28	12.756	
11,000.00	5,675.00	5,676.25	5,676.00	63.77	115.49	90.00	-958.24	2,889.71	1,899.27	1,758.23	141.04	13.466	
11,100.00	5,675.00	5,676.25	5,676.00	64.83	115.49	90.00	-958.24	2,889.71	1,996.66	1,855.82	140.84	14.177	
11,200.00	5,675.00	5,676.25	5,676.00	65.90	115.49	90.00	-958.24	2,889.71	2,094.29	1,953.63	140.66	14.889	
11,300.00	5,675.00	5,676.25	5,676.00	66.96	115.49	90.00	-958.24	2,889.71	2,192.14	2,051.63	140.51	15.602	
11,400.00	5,675.00	5,676.25	5,676.00	68.03	115.49	90.00	-958.24	2,889.71	2,290.17	2,149.80	140.37	16.315	
11,431.20	5,675.00	5,676.25	5,676.00	68.37	115.49	90.00	-958.24	2,889.71	2,320.79	2,180.45	140.33	16.537	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - W D MCINTYRE A #7 - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 300-UNKNOWN													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)					
0.00	0.00	0.00	0.00	0.00	0.00	146.79	-2,915.05	1,908.04	3,483.99				
100.00	100.00	92.00	92.00	0.29	1.76	146.79	-2,915.05	1,908.04	3,483.98	3,481.94	2.05	1,701.957	
200.00	200.00	192.00	192.00	0.65	3.67	146.79	-2,915.05	1,908.04	3,483.98	3,479.66	4.32	806.692	
300.00	300.00	292.00	292.00	1.00	5.59	146.79	-2,915.05	1,908.04	3,483.98	3,477.39	6.59	528.625	
400.00	399.98	391.98	391.98	1.35	9.42	-104.33	-2,915.05	1,908.04	3,484.41	3,473.64	10.77	323.499	
500.00	499.84	491.84	491.84	1.70	13.41	-104.38	-2,915.05	1,908.04	3,485.71	3,470.60	15.11	230.678	
600.00	599.45	591.45	591.45	2.05	17.40	-104.48	-2,915.05	1,908.04	3,487.89	3,468.45	19.45	179.345	
700.00	698.70	690.70	690.70	2.41	21.37	-104.61	-2,915.05	1,908.04	3,490.98	3,467.20	23.78	146.825	
800.00	797.47	789.47	789.47	2.77	25.32	-104.78	-2,915.05	1,908.04	3,494.99	3,466.90	28.09	124.414	
900.00	895.62	887.62	887.62	3.14	29.24	-104.98	-2,915.05	1,908.04	3,499.98	3,467.59	32.39	108.061	
1,000.00	993.06	985.06	985.06	3.52	33.14	-105.21	-2,915.05	1,908.04	3,505.98	3,469.32	36.66	95.623	
1,100.00	1,089.87	1,081.87	1,081.87	3.91	37.01	-105.56	-2,915.05	1,908.04	3,512.82	3,471.89	40.92	85.842	
1,200.00	1,186.65	1,178.65	1,178.65	4.30	40.89	-105.94	-2,915.05	1,908.04	3,519.86	3,474.67	45.18	77.905	
1,300.00	1,283.44	1,275.44	1,275.44	4.69	44.76	-106.32	-2,915.05	1,908.04	3,527.06	3,477.62	49.44	71.334	
1,400.00	1,380.22	1,372.22	1,372.22	5.09	48.63	-106.70	-2,915.05	1,908.04	3,534.43	3,480.72	53.71	65.807	
1,500.00	1,477.00	1,469.00	1,469.00	5.49	52.50	-107.08	-2,915.05	1,908.04	3,541.96	3,483.99	57.98	61.095	
1,600.00	1,573.78	1,565.78	1,565.78	5.89	56.37	-107.46	-2,915.05	1,908.04	3,549.66	3,487.42	62.24	57.030	
1,700.00	1,670.56	1,662.56	1,662.56	6.29	60.24	-107.83	-2,915.05	1,908.04	3,557.51	3,491.00	66.51	53.488	
1,800.00	1,767.35	1,759.35	1,759.35	6.69	64.11	-108.21	-2,915.05	1,908.04	3,565.53	3,494.75	70.78	50.375	
1,900.00	1,864.13	1,856.13	1,856.13	7.10	67.99	-108.58	-2,915.05	1,908.04	3,573.71	3,498.66	75.05	47.619	
2,000.00	1,960.91	1,952.91	1,952.91	7.50	71.86	-108.95	-2,915.05	1,908.04	3,582.04	3,502.72	79.32	45.160	
2,100.00	2,057.69	2,049.69	2,049.69	7.90	75.73	-109.32	-2,915.05	1,908.04	3,590.53	3,506.95	83.59	42.955	
2,200.00	2,154.47	2,146.47	2,146.47	8.31	79.60	-109.68	-2,915.05	1,908.04	3,599.18	3,511.32	87.86	40.966	
2,300.00	2,251.26	2,243.26	2,243.26	8.71	83.47	-110.05	-2,915.05	1,908.04	3,607.98	3,515.85	92.13	39.163	
2,400.00	2,348.04	2,340.04	2,340.04	9.12	87.34	-110.41	-2,915.05	1,908.04	3,616.94	3,520.54	96.40	37.521	
2,500.00	2,444.82	2,436.82	2,436.82	9.52	91.21	-110.78	-2,915.05	1,908.04	3,626.05	3,525.38	100.67	36.020	
2,600.00	2,541.62	2,533.62	2,533.62	9.93	95.08	-105.62	-2,915.05	1,908.04	3,634.45	3,529.51	104.94	34.634	
2,699.99	2,638.44	2,630.44	2,630.44	10.33	98.96	-98.24	-2,915.05	1,908.04	3,639.78	3,530.57	109.21	33.328	
2,800.00	2,735.22	2,727.22	2,727.22	10.74	102.83	-98.00	-2,915.05	1,908.04	3,643.32	3,529.84	113.48	32.105	
2,900.00	2,832.01	2,824.01	2,824.01	11.14	106.70	-98.37	-2,915.05	1,908.04	3,647.02	3,529.26	117.75	30.972	
3,000.00	2,928.79	2,920.79	2,920.79	11.54	110.57	-98.75	-2,915.05	1,908.04	3,650.88	3,528.86	122.03	29.919	
3,100.00	3,025.57	3,017.57	3,017.57	11.95	114.44	-99.13	-2,915.05	1,908.04	3,654.92	3,528.62	126.30	28.939	
3,200.00	3,122.35	3,114.35	3,114.35	12.35	118.31	-99.51	-2,915.05	1,908.04	3,659.13	3,528.56	130.57	28.024	
3,300.00	3,219.14	3,211.14	3,211.14	12.76	122.19	-99.88	-2,915.05	1,908.04	3,663.50	3,528.66	134.84	27.169	
3,400.00	3,315.92	3,307.92	3,307.92	13.16	126.06	-100.26	-2,915.05	1,908.04	3,668.04	3,528.93	139.11	26.367	
3,500.00	3,412.70	3,404.70	3,404.70	13.57	129.93	-100.63	-2,915.05	1,908.04	3,672.75	3,529.37	143.39	25.614	
3,600.00	3,509.48	3,501.48	3,501.48	13.97	133.80	-101.01	-2,915.05	1,908.04	3,677.63	3,529.97	147.66	24.906	
3,700.00	3,606.27	3,598.27	3,598.27	14.38	137.67	-101.38	-2,915.05	1,908.04	3,682.67	3,530.74	151.93	24.239	
3,800.00	3,703.05	3,695.05	3,695.05	14.78	141.54	-101.75	-2,915.05	1,908.04	3,687.87	3,531.67	156.20	23.609	
3,900.00	3,799.83	3,791.83	3,791.83	15.19	145.41	-102.12	-2,915.05	1,908.04	3,693.24	3,532.77	160.48	23.014	
4,000.00	3,896.61	3,888.61	3,888.61	15.60	149.28	-102.49	-2,915.05	1,908.04	3,698.77	3,534.03	164.75	22.451	
4,100.00	3,993.40	3,985.40	3,985.40	16.00	153.16	-102.86	-2,915.05	1,908.04	3,704.47	3,535.45	169.02	21.918	
4,200.00	4,090.18	4,082.18	4,082.18	16.41	157.03	-103.23	-2,915.05	1,908.04	3,710.33	3,537.04	173.29	21.411	
4,300.00	4,186.96	4,178.96	4,178.96	16.82	160.90	-103.59	-2,915.05	1,908.04	3,716.35	3,538.78	177.56	20.930	
4,400.00	4,283.74	4,275.74	4,275.74	17.23	164.77	-103.96	-2,915.05	1,908.04	3,722.52	3,540.69	181.83	20.472	
4,500.00	4,380.53	4,372.53	4,372.53	17.63	168.64	-104.32	-2,915.05	1,908.04	3,728.86	3,542.76	186.10	20.037	
4,600.00	4,477.31	4,469.31	4,469.31	18.04	172.51	-103.94	-2,915.05	1,908.04	3,735.34	3,544.97	190.37	19.621	
4,700.00	4,575.17	4,567.17	4,567.17	18.43	176.43	-86.13	-2,915.05	1,908.04	3,737.84	3,543.17	194.67	19.201	
4,800.00	4,674.18	4,666.18	4,666.18	18.77	180.39	-47.49	-2,915.05	1,908.04	3,733.04	3,534.06	198.98	18.761	
4,900.00	4,773.25	4,765.25	4,765.25	19.07	184.35	-6.18	-2,915.05	1,908.04	3,720.93	3,517.68	203.25	18.307	
5,000.00	4,871.30	4,863.30	4,863.30	19.33	188.27	14.71	-2,915.05	1,908.04	3,701.60	3,494.16	207.45	17.844	
5,100.00	4,967.25	4,959.25	4,959.25	19.57	192.11	25.43	-2,915.05	1,908.04	3,675.29	3,463.75	211.53	17.374	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - W D MCINTYRE A #7 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 300-UNKNOWN													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning	
							+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,200.00	5,060.05	5,052.05	5,052.05	19.79	195.82	32.40	-2,915.05	1,908.04	3,642.33	3,426.85	215.48	16.904		
5,300.00	5,148.68	5,140.68	5,140.68	20.00	199.37	37.93	-2,915.05	1,908.04	3,603.19	3,383.96	219.23	16.436		
5,400.00	5,232.18	5,224.18	5,224.18	20.19	202.71	42.96	-2,915.05	1,908.04	3,558.45	3,335.69	222.76	15.974		
5,500.00	5,309.62	5,301.62	5,301.62	20.38	205.80	47.94	-2,915.05	1,908.04	3,508.80	3,282.76	226.04	15.523		
5,600.00	5,380.17	5,372.17	5,372.17	20.57	208.63	53.09	-2,915.05	1,908.04	3,455.01	3,225.97	229.03	15.085		
5,700.00	5,443.04	5,435.04	5,435.04	20.77	211.14	58.47	-2,915.05	1,908.04	3,397.94	3,166.23	231.72	14.664		
5,799.99	5,497.55	5,489.55	5,489.55	20.98	213.32	64.05	-2,915.05	1,908.04	3,338.53	3,104.46	234.07	14.263		
5,900.00	5,547.55	5,539.55	5,539.55	21.24	215.32	64.96	-2,915.05	1,908.04	3,278.81	3,042.55	236.26	13.878		
5,999.99	5,597.55	5,589.55	5,589.55	21.54	217.32	65.82	-2,915.05	1,908.04	3,220.32	2,981.84	238.49	13.503		
6,100.00	5,639.98	5,631.98	5,631.98	21.86	219.02	73.50	-2,915.05	1,908.04	3,160.62	2,920.19	240.43	13.146		
6,200.00	5,666.06	5,658.06	5,658.06	22.21	220.06	81.79	-2,915.05	1,908.04	3,098.61	2,856.88	241.73	12.818		
6,299.99	5,675.00	5,667.00	5,667.00	22.54	220.42	89.89	-2,915.05	1,908.04	3,036.52	2,794.18	242.35	12.530		
6,400.00	5,675.00	5,667.00	5,667.00	22.90	220.42	90.00	-2,915.05	1,908.04	2,976.13	2,733.50	242.63	12.266		
6,500.00	5,675.00	5,667.00	5,667.00	23.32	220.42	90.00	-2,915.05	1,908.04	2,917.93	2,674.96	242.97	12.009		
6,600.00	5,675.00	5,667.00	5,667.00	23.78	220.42	90.00	-2,915.05	1,908.04	2,862.04	2,618.67	243.37	11.760		
6,700.00	5,675.00	5,667.00	5,667.00	24.29	220.42	90.00	-2,915.05	1,908.04	2,808.59	2,564.77	243.82	11.519		
6,800.00	5,675.00	5,667.00	5,667.00	24.84	220.42	90.00	-2,915.05	1,908.04	2,757.74	2,513.40	244.34	11.286		
6,900.00	5,675.00	5,667.00	5,667.00	25.43	220.42	90.00	-2,915.05	1,908.04	2,709.63	2,464.71	244.92	11.063		
7,000.00	5,675.00	5,667.00	5,667.00	26.06	220.42	90.00	-2,915.05	1,908.04	2,664.40	2,418.84	245.56	10.850		
7,100.00	5,675.00	5,667.00	5,667.00	26.72	220.42	90.00	-2,915.05	1,908.04	2,622.21	2,375.96	246.25	10.649		
7,200.00	5,675.00	5,667.00	5,667.00	27.41	220.42	90.00	-2,915.05	1,908.04	2,583.20	2,336.20	247.00	10.458		
7,300.00	5,675.00	5,667.00	5,667.00	28.13	220.42	90.00	-2,915.05	1,908.04	2,547.52	2,299.72	247.80	10.281		
7,400.00	5,675.00	5,667.00	5,667.00	28.88	220.42	90.00	-2,915.05	1,908.04	2,515.31	2,266.68	248.64	10.116		
7,500.00	5,675.00	5,667.00	5,667.00	29.66	220.42	90.00	-2,915.05	1,908.04	2,486.71	2,237.20	249.51	9.966		
7,600.00	5,675.00	5,667.00	5,667.00	30.45	220.42	90.00	-2,915.05	1,908.04	2,461.84	2,211.43	250.42	9.831		
7,700.00	5,675.00	5,667.00	5,667.00	31.27	220.42	90.00	-2,915.05	1,908.04	2,440.82	2,189.48	251.35	9.711		
7,800.00	5,675.00	5,667.00	5,667.00	32.10	220.42	90.00	-2,915.05	1,908.04	2,423.75	2,171.46	252.29	9.607		
7,900.00	5,675.00	5,667.00	5,667.00	32.95	220.42	90.00	-2,915.05	1,908.04	2,410.71	2,157.47	253.24	9.520		
8,000.00	5,675.00	5,667.00	5,667.00	33.82	220.42	90.00	-2,915.05	1,908.04	2,401.76	2,147.58	254.18	9.449		
8,100.00	5,675.00	5,667.00	5,667.00	34.70	220.42	90.00	-2,915.05	1,908.04	2,396.96	2,141.84	255.11	9.396		
8,165.29	5,675.00	5,667.00	5,667.00	35.29	220.42	90.00	-2,915.05	1,908.04	2,396.07	2,140.36	255.71	9.370 CC		
8,200.00	5,675.00	5,667.00	5,667.00	35.60	220.42	90.00	-2,915.05	1,908.04	2,396.32	2,140.30	256.02	9.360 ES		
8,300.00	5,675.00	5,667.00	5,667.00	36.51	220.42	90.00	-2,915.05	1,908.04	2,399.85	2,142.95	256.90	9.342		
8,400.00	5,675.00	5,667.00	5,667.00	37.43	220.42	90.00	-2,915.05	1,908.04	2,407.53	2,149.79	257.75	9.341 SF		
8,500.00	5,675.00	5,667.00	5,667.00	38.37	220.42	90.00	-2,915.05	1,908.04	2,419.33	2,160.78	258.55	9.357		
8,600.00	5,675.00	5,667.00	5,667.00	39.31	220.42	90.00	-2,915.05	1,908.04	2,435.18	2,175.87	259.32	9.391		
8,700.00	5,675.00	5,667.00	5,667.00	40.26	220.42	90.00	-2,915.05	1,908.04	2,455.01	2,194.98	260.03	9.441		
8,800.00	5,675.00	5,667.00	5,667.00	41.22	220.42	90.00	-2,915.05	1,908.04	2,478.71	2,218.02	260.69	9.508		
8,900.00	5,675.00	5,667.00	5,667.00	42.19	220.42	90.00	-2,915.05	1,908.04	2,506.18	2,244.88	261.30	9.591		
9,000.00	5,675.00	5,667.00	5,667.00	43.17	220.42	90.00	-2,915.05	1,908.04	2,537.30	2,275.44	261.85	9.690		
9,100.00	5,675.00	5,667.00	5,667.00	44.15	220.42	90.00	-2,915.05	1,908.04	2,571.93	2,309.57	262.36	9.803		
9,200.00	5,675.00	5,667.00	5,667.00	45.14	220.42	90.00	-2,915.05	1,908.04	2,609.94	2,347.13	262.81	9.931		
9,300.00	5,675.00	5,667.00	5,667.00	46.14	220.42	90.00	-2,915.05	1,908.04	2,651.17	2,387.96	263.21	10.072		
9,400.00	5,675.00	5,667.00	5,667.00	47.15	220.42	90.00	-2,915.05	1,908.04	2,695.49	2,431.92	263.57	10.227		
9,500.00	5,675.00	5,667.00	5,667.00	48.15	220.42	90.00	-2,915.05	1,908.04	2,742.73	2,478.86	263.88	10.394		
9,600.00	5,675.00	5,667.00	5,667.00	49.17	220.42	90.00	-2,915.05	1,908.04	2,792.76	2,528.62	264.14	10.573		
9,700.00	5,675.00	5,667.00	5,667.00	50.19	220.42	90.00	-2,915.05	1,908.04	2,845.43	2,581.06	264.37	10.763		
9,800.00	5,675.00	5,667.00	5,667.00	51.21	220.42	90.00	-2,915.05	1,908.04	2,900.59	2,636.02	264.57	10.964		
9,900.00	5,675.00	5,667.00	5,667.00	52.24	220.42	90.00	-2,915.05	1,908.04	2,958.10	2,693.37	264.73	11.174		
10,000.00	5,675.00	5,667.00	5,667.00	53.27	220.42	90.00	-2,915.05	1,908.04	3,017.83	2,752.97	264.86	11.394		
10,100.00	5,675.00	5,667.00	5,667.00	54.31	220.42	90.00	-2,915.05	1,908.04	3,079.65	2,814.69	264.96	11.623		
10,200.00	5,675.00	5,667.00	5,667.00	55.34	220.42	90.00	-2,915.05	1,908.04	3,143.44	2,878.39	265.04	11.860		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - W D MCINTYRE A #7 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 300-UNKNOWN													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre			Rule Assigned:			Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,300.00	5,675.00	5,667.00	5,667.00	56.39	220.42	90.00	-2,915.05	1,908.04	3,209.07	2,943.97	265.10	12.105		
10,400.00	5,675.00	5,667.00	5,667.00	57.43	220.42	90.00	-2,915.05	1,908.04	3,276.44	3,011.30	265.14	12.357		
10,500.00	5,675.00	5,667.00	5,667.00	58.48	220.42	90.00	-2,915.05	1,908.04	3,345.45	3,080.28	265.16	12.616		
10,600.00	5,675.00	5,667.00	5,667.00	59.53	220.42	90.00	-2,915.05	1,908.04	3,415.99	3,150.81	265.17	12.882		
10,700.00	5,675.00	5,667.00	5,667.00	60.59	220.42	90.00	-2,915.05	1,908.04	3,487.97	3,222.80	265.17	13.154		
10,800.00	5,675.00	5,667.00	5,667.00	61.64	220.42	90.00	-2,915.05	1,908.04	3,561.30	3,296.15	265.15	13.431		
10,900.00	5,675.00	5,667.00	5,667.00	62.70	220.42	90.00	-2,915.05	1,908.04	3,635.90	3,370.78	265.12	13.714		
11,000.00	5,675.00	5,667.00	5,667.00	63.77	220.42	90.00	-2,915.05	1,908.04	3,711.70	3,446.61	265.09	14.002		
11,100.00	5,675.00	5,667.00	5,667.00	64.83	220.42	90.00	-2,915.05	1,908.04	3,788.62	3,523.58	265.05	14.294		
11,200.00	5,675.00	5,667.00	5,667.00	65.90	220.42	90.00	-2,915.05	1,908.04	3,866.60	3,601.60	265.00	14.591		
11,300.00	5,675.00	5,667.00	5,667.00	66.96	220.42	90.00	-2,915.05	1,908.04	3,945.57	3,680.63	264.95	14.892		
11,400.00	5,675.00	5,667.00	5,667.00	68.03	220.42	90.00	-2,915.05	1,908.04	4,025.48	3,760.59	264.89	15.197		
11,431.20	5,675.00	5,667.00	5,667.00	68.37	220.42	90.00	-2,915.05	1,908.04	4,050.59	3,785.72	264.87	15.293		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - W.D. MCINTYRE C #8 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 245-INC-ONLY													Offset Well Error:
Reference	Offset	Semi Major Axis		Highside		Offset Wellbore Centre		Rule Assigned:		Distance		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		
0.00	0.00	16.00	16.00	0.00	0.14	93.15	-267.55	4,867.49	4,874.84				
100.00	100.00	116.00	116.00	0.29	1.00	93.15	-267.55	4,867.49	4,874.84	4,873.55	1.29	3,782.122	
200.00	200.00	216.00	216.00	0.65	1.87	93.15	-267.55	4,867.49	4,874.84	4,872.33	2.51	1,941.161	
300.00	300.00	316.00	316.00	1.00	3.51	93.15	-267.55	4,867.49	4,874.84	4,870.32	4.52	1,079.577	
400.00	399.98	415.98	415.98	1.35	5.48	-157.95	-267.55	4,867.49	4,876.46	4,869.63	6.83	714.106	
500.00	499.84	515.26	515.25	1.70	7.43	-157.94	-267.26	4,867.49	4,881.29	4,872.16	9.13	534.791	
600.00	599.45	615.46	615.45	2.05	9.42	-157.91	-267.55	4,867.49	4,889.39	4,877.91	11.48	426.035	
700.00	698.70	714.71	714.70	2.41	11.60	-157.88	-267.55	4,867.49	4,900.69	4,886.68	14.01	349.756	
800.00	797.47	813.47	813.47	2.77	13.77	-157.84	-267.55	4,867.49	4,915.21	4,898.67	16.54	297.207	
900.00	895.62	911.08	911.06	3.14	15.91	-157.80	-266.56	4,867.49	4,932.87	4,913.83	19.04	259.082	
1,000.00	993.06	1,007.72	1,007.70	3.52	18.03	-157.73	-266.94	4,867.49	4,953.79	4,932.27	21.52	230.188	
1,100.00	1,089.87	1,105.90	1,105.87	3.91	20.20	-157.78	-267.55	4,867.49	4,977.08	4,953.03	24.05	206.967	
6,200.00	5,666.06	5,684.71	5,684.02	22.21	142.63	-15.70	-266.36	4,867.49	4,938.31	4,776.12	162.19	30.447	
6,299.99	5,675.00	5,693.77	5,693.08	22.54	142.87	-87.74	-266.43	4,867.49	4,838.97	4,676.53	162.45	29.788	
6,400.00	5,675.00	5,693.77	5,693.08	22.90	142.87	-90.49	-266.43	4,867.49	4,739.09	4,576.64	162.45	29.172	
6,500.00	5,675.00	5,693.77	5,693.08	23.32	142.87	-90.49	-266.43	4,867.49	4,639.22	4,476.76	162.46	28.556	
6,600.00	5,675.00	5,693.76	5,693.07	23.78	142.87	-90.49	-266.43	4,867.49	4,539.36	4,376.89	162.47	27.939	
6,700.00	5,675.00	5,693.76	5,693.07	24.29	142.87	-90.49	-266.43	4,867.49	4,439.51	4,277.03	162.48	27.323	
6,800.00	5,675.00	5,693.76	5,693.07	24.84	142.87	-90.49	-266.43	4,867.49	4,339.67	4,177.17	162.50	26.706	
6,900.00	5,675.00	5,693.76	5,693.07	25.43	142.87	-90.49	-266.43	4,867.49	4,239.83	4,077.31	162.51	26.089	
7,000.00	5,675.00	5,693.75	5,693.06	26.06	142.87	-90.49	-266.43	4,867.49	4,140.00	3,977.47	162.53	25.472	
7,100.00	5,675.00	5,693.75	5,693.06	26.72	142.87	-90.49	-266.43	4,867.49	4,040.17	3,877.63	162.55	24.855	
7,200.00	5,675.00	5,693.75	5,693.06	27.41	142.87	-90.48	-266.43	4,867.49	3,940.36	3,777.79	162.57	24.238	
7,300.00	5,675.00	5,693.75	5,693.06	28.13	142.87	-90.48	-266.43	4,867.49	3,840.56	3,677.97	162.59	23.621	
7,400.00	5,675.00	5,693.74	5,693.05	28.88	142.87	-90.48	-266.43	4,867.49	3,740.76	3,578.15	162.61	23.004	
7,500.00	5,675.00	5,693.74	5,693.05	29.66	142.87	-90.48	-266.43	4,867.49	3,640.98	3,478.34	162.64	22.387	
7,600.00	5,675.00	5,693.74	5,693.05	30.45	142.87	-90.48	-266.43	4,867.49	3,541.21	3,378.54	162.67	21.769	
7,700.00	5,675.00	5,693.74	5,693.05	31.27	142.87	-90.48	-266.43	4,867.49	3,441.45	3,278.75	162.70	21.152	
7,800.00	5,675.00	5,693.73	5,693.04	32.10	142.87	-90.48	-266.43	4,867.49	3,341.71	3,178.98	162.73	20.535	
7,900.00	5,675.00	5,693.73	5,693.04	32.95	142.87	-90.48	-266.43	4,867.49	3,241.99	3,079.21	162.77	19.917	
8,000.00	5,675.00	5,693.73	5,693.04	33.82	142.87	-90.48	-266.43	4,867.49	3,142.28	2,979.47	162.81	19.300	
8,100.00	5,675.00	5,693.73	5,693.04	34.70	142.87	-90.48	-266.43	4,867.49	3,042.59	2,879.73	162.86	18.683	
8,200.00	5,675.00	5,693.72	5,693.03	35.60	142.87	-90.48	-266.43	4,867.49	2,942.92	2,780.02	162.90	18.065	
8,300.00	5,675.00	5,693.72	5,693.03	36.51	142.87	-90.48	-266.43	4,867.49	2,843.27	2,680.32	162.95	17.448	
8,400.00	5,675.00	5,693.72	5,693.03	37.43	142.87	-90.48	-266.43	4,867.49	2,743.65	2,580.64	163.01	16.831	
8,500.00	5,675.00	5,693.72	5,693.03	38.37	142.87	-90.48	-266.43	4,867.49	2,644.06	2,480.99	163.07	16.214	
8,600.00	5,675.00	5,693.71	5,693.02	39.31	142.87	-90.48	-266.43	4,867.49	2,544.51	2,381.36	163.14	15.597	
8,700.00	5,675.00	5,693.71	5,693.02	40.26	142.87	-90.48	-266.43	4,867.49	2,444.98	2,281.77	163.22	14.980	
8,800.00	5,675.00	5,693.71	5,693.02	41.22	142.87	-90.48	-266.43	4,867.49	2,345.50	2,182.20	163.30	14.363	
8,900.00	5,675.00	5,693.71	5,693.02	42.19	142.87	-90.47	-266.43	4,867.49	2,246.07	2,082.67	163.39	13.746	
9,000.00	5,675.00	5,693.70	5,693.01	43.17	142.87	-90.47	-266.43	4,867.49	2,146.68	1,983.19	163.50	13.130	
9,100.00	5,675.00	5,693.70	5,693.01	44.15	142.87	-90.47	-266.43	4,867.49	2,047.36	1,883.75	163.61	12.513	
9,200.00	5,675.00	5,693.70	5,693.01	45.14	142.87	-90.47	-266.43	4,867.49	1,948.11	1,784.36	163.75	11.897	
9,300.00	5,675.00	5,693.70	5,693.01	46.14	142.87	-90.47	-266.43	4,867.49	1,848.93	1,685.04	163.90	11.281	
9,400.00	5,675.00	5,693.69	5,693.00	47.15	142.87	-90.47	-266.43	4,867.49	1,749.85	1,585.78	164.07	10.665	
9,500.00	5,675.00	5,693.69	5,693.00	48.15	142.87	-90.47	-266.43	4,867.49	1,650.88	1,486.61	164.27	10.050	
9,600.00	5,675.00	5,693.69	5,693.00	49.17	142.87	-90.47	-266.43	4,867.49	1,552.05	1,387.54	164.51	9.434	
9,700.00	5,675.00	5,693.69	5,693.00	50.19	142.87	-90.47	-266.43	4,867.49	1,453.37	1,288.58	164.79	8.819	
9,800.00	5,675.00	5,693.68	5,692.99	51.21	142.87	-90.47	-266.43	4,867.49	1,354.89	1,189.76	165.13	8.205	
9,900.00	5,675.00	5,693.68	5,692.99	52.24	142.87	-90.47	-266.43	4,867.49	1,256.64	1,091.10	165.54	7.591	
10,000.00	5,675.00	5,693.68	5,692.99	53.27	142.87	-90.47	-266.43	4,867.49	1,158.70	992.65	166.05	6.978	
10,100.00	5,675.00	5,693.68	5,692.99	54.31	142.87	-90.47	-266.43	4,867.49	1,061.14	894.46	166.68	6.366	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - W.D. MCINTYRE C #8 - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 245-INC-ONLY													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Highside		Offset Wellbore Centre		Rule Assigned:		Distance		Separation	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Factor	
10,200.00	5,675.00	5,693.67	5,692.99	55.34	142.87	-90.47	-266.43	4,867.49	964.08	796.59	167.49	5.756	
10,300.00	5,675.00	5,693.67	5,692.98	56.39	142.87	-90.47	-266.43	4,867.49	867.69	699.15	168.55	5.148	
10,400.00	5,675.00	5,693.67	5,692.98	57.43	142.87	-90.47	-266.43	4,867.49	772.22	602.28	169.94	4.544	
10,500.00	5,675.00	5,693.67	5,692.98	58.48	142.87	-90.47	-266.43	4,867.49	678.06	506.22	171.84	3.946	
10,600.00	5,675.00	5,693.66	5,692.98	59.53	142.87	-90.46	-266.43	4,867.49	585.83	411.37	174.46	3.358	
10,700.00	5,675.00	5,693.66	5,692.97	60.59	142.87	-90.46	-266.43	4,867.49	496.62	318.44	178.17	2.787	
10,800.00	5,675.00	5,693.66	5,692.97	61.64	142.87	-90.46	-266.43	4,867.49	412.39	228.90	183.48	2.248	
10,900.00	5,675.00	5,693.66	5,692.97	62.70	142.87	-90.46	-266.43	4,867.49	336.89	145.98	190.91	1.765	
11,000.00	5,675.00	5,693.65	5,692.97	63.77	142.87	-90.46	-266.43	4,867.49	277.36	77.27	200.09	1.386	Level 3
11,100.00	5,675.00	5,693.65	5,692.96	64.83	142.87	-90.46	-266.43	4,867.49	245.69	38.41	207.28	1.185	Level 2
11,132.83	5,675.00	5,693.65	5,692.96	65.18	142.87	-90.46	-266.43	4,867.49	243.49	35.45	208.04	1.170	Level 2, CC, ES, SF
11,200.00	5,675.00	5,693.65	5,692.96	65.90	142.87	-90.46	-266.43	4,867.49	252.59	46.17	206.42	1.224	Level 2
11,300.00	5,675.00	5,693.65	5,692.96	66.96	142.87	-90.46	-266.43	4,867.49	295.35	96.47	198.88	1.485	Level 3
11,400.00	5,675.00	5,693.64	5,692.96	68.03	142.87	-90.46	-266.43	4,867.49	361.48	170.80	190.68	1.896	
11,431.20	5,675.00	5,693.64	5,692.95	68.37	142.87	-90.46	-266.43	4,867.49	385.11	196.65	188.46	2.043	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - W.D. MCINTYRE C #9 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 236-INC-ONLY		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:				Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	18.00	18.00	0.00	0.15	84.69	390.70	4,204.79	4,222.90					
100.00	100.00	118.00	118.00	0.29	0.97	84.69	390.70	4,204.79	4,222.90	4,221.64	1.26	3,348.286		
200.00	200.00	218.00	218.00	0.65	1.80	84.69	390.70	4,204.79	4,222.90	4,220.46	2.45	1,726.821		
300.00	300.00	318.00	318.00	1.00	3.50	84.69	390.70	4,204.79	4,222.90	4,218.40	4.50	937.527		
400.00	399.98	417.98	417.98	1.35	5.39	-166.41	390.70	4,204.79	4,224.60	4,217.85	6.74	626.339		
500.00	499.84	518.30	518.30	1.70	7.29	-166.40	390.84	4,204.79	4,229.70	4,220.71	8.99	470.419		
600.00	599.45	617.45	617.45	2.05	9.20	-166.39	390.70	4,204.79	4,238.16	4,226.90	11.26	376.474		
700.00	698.70	716.70	716.70	2.41	11.35	-166.37	390.70	4,204.79	4,250.01	4,236.25	13.76	308.913		
800.00	797.47	816.83	816.82	2.77	13.51	-166.35	391.27	4,204.79	4,265.27	4,249.00	16.28	262.022		
900.00	895.62	913.64	913.62	3.14	15.60	-166.32	390.70	4,204.79	4,283.78	4,265.05	18.73	228.737		
1,000.00	993.06	1,011.07	1,011.06	3.52	17.75	-166.28	390.70	4,204.79	4,305.66	4,284.43	21.23	202.831		
1,100.00	1,089.87	1,107.89	1,107.87	3.91	19.87	-166.33	390.70	4,204.79	4,330.02	4,306.31	23.71	182.614		
1,200.00	1,186.65	1,205.63	1,205.59	4.30	22.02	-166.42	391.98	4,204.79	4,354.64	4,328.44	26.21	166.157		
1,300.00	1,283.44	1,304.41	1,304.37	4.69	24.20	-166.50	391.55	4,204.79	4,379.11	4,350.38	28.73	152.423		
1,400.00	1,380.22	1,403.28	1,403.22	5.09	26.37	-166.56	390.69	4,204.79	4,403.54	4,372.28	31.26	140.888		
1,500.00	1,477.00	1,495.06	1,495.00	5.49	28.17	-166.63	390.70	4,204.79	4,428.06	4,394.65	33.41	132.545		
1,600.00	1,573.78	1,591.84	1,591.78	5.89	30.07	-166.71	390.70	4,204.79	4,452.59	4,416.92	35.66	124.852		
1,700.00	1,670.56	1,689.91	1,689.85	6.29	32.00	-166.80	391.57	4,204.79	4,477.21	4,439.27	37.94	117.995		
1,800.00	1,767.35	1,788.64	1,788.56	6.69	33.94	-166.86	391.11	4,204.79	4,501.71	4,461.47	40.24	111.874		
1,900.00	1,864.13	1,882.21	1,882.13	7.10	35.75	-166.93	390.70	4,204.79	4,526.21	4,483.81	42.40	106.743		
2,000.00	1,960.91	1,978.99	1,978.91	7.50	37.58	-167.00	390.70	4,204.79	4,550.77	4,506.18	44.59	102.061		
2,100.00	2,057.69	2,075.79	2,075.71	7.90	39.41	-167.08	391.21	4,204.79	4,575.39	4,528.61	46.78	97.817		
2,200.00	2,154.47	2,173.52	2,173.44	8.31	41.26	-167.15	391.11	4,204.79	4,599.95	4,550.97	48.98	93.915		
2,300.00	2,251.26	2,271.29	2,271.21	8.71	43.11	-167.21	390.84	4,204.79	4,624.49	4,573.31	51.19	90.348		
2,400.00	2,348.04	2,366.12	2,366.04	9.12	44.99	-167.28	390.70	4,204.79	4,649.06	4,595.63	53.43	87.016		
2,500.00	2,444.82	2,462.90	2,462.82	9.52	46.97	-167.35	390.70	4,204.79	4,673.64	4,617.88	55.76	83.813		
2,600.00	2,541.62	2,560.01	2,559.92	9.93	48.96	-161.61	391.46	4,204.79	4,698.04	4,639.93	58.11	80.854		
2,699.99	2,638.44	2,658.38	2,658.29	10.33	50.97	-153.55	391.27	4,204.79	4,721.23	4,660.75	60.48	78.068		
2,800.00	2,735.22	2,756.81	2,756.71	10.74	52.98	-153.02	390.81	4,204.79	4,743.74	4,680.89	62.85	75.477		
2,900.00	2,832.01	2,850.10	2,850.01	11.14	54.94	-153.15	390.70	4,204.79	4,766.31	4,701.13	65.18	73.130		
3,000.00	2,928.79	2,946.89	2,946.79	11.54	57.00	-153.29	390.70	4,204.79	4,788.92	4,721.33	67.59	70.851		
3,100.00	3,025.57	3,044.93	3,044.82	11.95	59.08	-153.43	391.60	4,204.79	4,811.67	4,741.63	70.03	68.704		
3,200.00	3,122.35	3,144.26	3,144.14	12.35	61.18	-153.57	391.21	4,204.79	4,834.28	4,761.77	72.51	66.674		
3,300.00	3,219.14	3,237.26	3,237.14	12.76	63.16	-153.69	390.70	4,204.79	4,856.90	4,782.05	74.84	64.896		
3,400.00	3,315.92	3,334.04	3,333.92	13.16	65.21	-153.82	390.70	4,204.79	4,879.60	4,802.35	77.26	63.159		
3,500.00	3,412.70	3,430.82	3,430.70	13.57	67.27	-153.95	390.70	4,204.79	4,902.34	4,822.66	79.68	61.527		
3,600.00	3,509.48	3,529.72	3,529.58	13.97	69.37	-154.09	391.60	4,204.79	4,925.22	4,843.08	82.14	59.960		
3,700.00	3,606.27	3,629.15	3,629.02	14.38	71.48	-154.21	391.11	4,204.79	4,947.93	4,863.32	84.62	58.474		
3,800.00	3,703.05	3,721.19	3,721.05	14.78	73.43	-154.33	390.70	4,204.79	4,970.68	4,883.74	86.93	57.177		
3,900.00	3,799.83	3,817.97	3,817.83	15.19	75.49	-154.45	390.70	4,204.79	4,993.50	4,904.15	89.35	55.884		
5,500.00	5,309.62	5,327.88	5,327.62	20.38	111.50	-18.91	390.70	4,204.79	4,945.62	4,815.26	130.36	37.937		
5,600.00	5,380.17	5,398.42	5,398.17	20.57	113.58	-18.99	390.70	4,204.79	4,876.78	4,744.20	132.58	36.784		
5,700.00	5,443.04	5,461.30	5,461.04	20.77	115.43	-19.73	390.70	4,204.79	4,800.89	4,666.35	134.54	35.683		
5,799.99	5,497.55	5,516.23	5,515.94	20.98	117.04	-21.32	392.68	4,204.79	4,719.17	4,582.93	136.25	34.637		
5,900.00	5,547.55	5,571.20	5,570.89	21.24	118.66	-21.74	392.50	4,204.79	4,634.17	4,496.23	137.94	33.596		
5,999.99	5,597.55	5,626.17	5,625.84	21.54	120.27	-22.15	392.04	4,204.79	4,549.18	4,409.55	139.63	32.580		
6,100.00	5,639.98	5,672.82	5,672.48	21.86	121.65	-31.22	391.41	4,204.79	4,460.48	4,319.40	141.08	31.617		
6,200.00	5,666.06	5,701.50	5,701.14	22.21	122.49	-50.85	390.92	4,204.79	4,366.02	4,224.04	141.98	30.751		
6,299.99	5,675.00	5,711.33	5,710.97	22.54	122.78	-90.50	390.73	4,204.79	4,268.73	4,126.42	142.31	29.996		
6,400.00	5,675.00	5,711.32	5,710.96	22.90	122.78	-91.14	390.73	4,204.79	4,171.03	4,028.68	142.35	29.301		
6,500.00	5,675.00	5,711.32	5,710.96	23.32	122.78	-91.14	390.73	4,204.79	4,073.46	3,931.06	142.40	28.606		
6,600.00	5,675.00	5,711.31	5,710.95	23.78	122.78	-91.14	390.73	4,204.79	3,976.01	3,833.55	142.46	27.910		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: OCHO_TESORO OFFSETS - W.D. MCINTYRE C #9 - Wellbore #1 - Wellbore #1													Offset Site Error:
Survey Program: 236-INC-ONLY													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
6,700.00	5,675.00	5,711.30	5,710.94	24.29	122.78	-91.14	390.73	4,204.79	3,878.69	3,736.16	142.52	27.215	
6,800.00	5,675.00	5,711.30	5,710.94	24.84	122.78	-91.14	390.73	4,204.79	3,781.50	3,638.91	142.60	26.519	
6,900.00	5,675.00	5,711.29	5,710.93	25.43	122.78	-91.14	390.73	4,204.79	3,684.47	3,541.79	142.68	25.823	
7,000.00	5,675.00	5,711.28	5,710.92	26.06	122.78	-91.14	390.73	4,204.79	3,587.61	3,444.83	142.78	25.127	
7,100.00	5,675.00	5,711.28	5,710.92	26.72	122.78	-91.14	390.73	4,204.79	3,490.92	3,348.03	142.89	24.431	
7,200.00	5,675.00	5,711.27	5,710.91	27.41	122.78	-91.14	390.73	4,204.79	3,394.42	3,251.41	143.01	23.735	
7,300.00	5,675.00	5,711.26	5,710.91	28.13	122.78	-91.14	390.73	4,204.79	3,298.13	3,154.98	143.15	23.040	
7,400.00	5,675.00	5,711.26	5,710.90	28.88	122.78	-91.14	390.73	4,204.79	3,202.06	3,058.75	143.31	22.344	
7,500.00	5,675.00	5,711.25	5,710.89	29.66	122.78	-91.14	390.73	4,204.79	3,106.25	2,962.76	143.49	21.648	
7,600.00	5,675.00	5,711.24	5,710.89	30.45	122.78	-91.14	390.73	4,204.79	3,010.71	2,867.02	143.69	20.953	
7,700.00	5,675.00	5,711.24	5,710.88	31.27	122.78	-91.13	390.73	4,204.79	2,915.46	2,771.55	143.91	20.258	
7,800.00	5,675.00	5,711.23	5,710.87	32.10	122.78	-91.13	390.73	4,204.79	2,820.55	2,676.38	144.17	19.564	
7,900.00	5,675.00	5,711.23	5,710.87	32.95	122.78	-91.13	390.73	4,204.79	2,726.00	2,581.54	144.45	18.871	
8,000.00	5,675.00	5,711.22	5,710.86	33.82	122.78	-91.13	390.73	4,204.79	2,631.85	2,487.07	144.78	18.179	
8,100.00	5,675.00	5,711.21	5,710.85	34.70	122.78	-91.13	390.73	4,204.79	2,538.15	2,393.01	145.14	17.488	
8,200.00	5,675.00	5,711.21	5,710.85	35.60	122.78	-91.13	390.74	4,204.79	2,444.95	2,299.40	145.55	16.798	
8,300.00	5,675.00	5,711.20	5,710.84	36.51	122.78	-91.13	390.74	4,204.79	2,352.31	2,206.30	146.01	16.110	
8,400.00	5,675.00	5,711.19	5,710.83	37.43	122.77	-91.13	390.74	4,204.79	2,260.29	2,113.76	146.53	15.425	
8,500.00	5,675.00	5,711.19	5,710.83	38.37	122.77	-91.13	390.74	4,204.79	2,168.98	2,021.86	147.12	14.743	
8,600.00	5,675.00	5,711.18	5,710.82	39.31	122.77	-91.13	390.74	4,204.79	2,078.48	1,930.69	147.78	14.064	
8,700.00	5,675.00	5,711.17	5,710.81	40.26	122.77	-91.13	390.74	4,204.79	1,988.88	1,840.35	148.53	13.390	
8,800.00	5,675.00	5,711.17	5,710.81	41.22	122.77	-91.13	390.74	4,204.79	1,900.32	1,750.94	149.38	12.722	
8,900.00	5,675.00	5,711.16	5,710.80	42.19	122.77	-91.13	390.74	4,204.79	1,812.95	1,662.62	150.33	12.060	
9,000.00	5,675.00	5,711.15	5,710.79	43.17	122.77	-91.13	390.74	4,204.79	1,726.95	1,575.54	151.40	11.406	
9,100.00	5,675.00	5,711.15	5,710.79	44.15	122.77	-91.13	390.74	4,204.79	1,642.53	1,489.92	152.62	10.763	
9,200.00	5,675.00	5,711.14	5,710.78	45.14	122.77	-91.13	390.74	4,204.79	1,559.96	1,405.99	153.98	10.131	
9,300.00	5,675.00	5,711.13	5,710.77	46.14	122.77	-91.13	390.74	4,204.79	1,479.55	1,324.04	155.51	9.514	
9,400.00	5,675.00	5,711.13	5,710.77	47.15	122.77	-91.13	390.74	4,204.79	1,401.65	1,244.44	157.22	8.915	
9,500.00	5,675.00	5,711.12	5,710.76	48.15	122.77	-91.13	390.74	4,204.79	1,326.73	1,167.61	159.12	8.338	
9,600.00	5,675.00	5,711.11	5,710.75	49.17	122.77	-91.13	390.74	4,204.79	1,255.30	1,094.09	161.21	7.787	
9,700.00	5,675.00	5,711.11	5,710.75	50.19	122.77	-91.13	390.74	4,204.79	1,188.00	1,024.50	163.50	7.266	
9,800.00	5,675.00	5,711.10	5,710.74	51.21	122.77	-91.13	390.74	4,204.79	1,125.57	959.61	165.96	6.782	
9,900.00	5,675.00	5,711.09	5,710.74	52.24	122.77	-91.13	390.74	4,204.79	1,068.87	900.32	168.55	6.342	
10,000.00	5,675.00	5,711.09	5,710.73	53.27	122.77	-91.13	390.74	4,204.79	1,018.85	847.65	171.21	5.951	
10,100.00	5,675.00	5,711.08	5,710.72	54.31	122.77	-91.12	390.74	4,204.79	976.54	802.72	173.82	5.618	
10,200.00	5,675.00	5,711.07	5,710.72	55.34	122.77	-91.12	390.74	4,204.79	942.97	766.70	176.27	5.349	
10,300.00	5,675.00	5,711.07	5,710.71	56.39	122.77	-91.12	390.74	4,204.79	919.12	740.71	178.41	5.152	
10,400.00	5,675.00	5,711.06	5,710.70	57.43	122.77	-91.12	390.74	4,204.79	905.73	725.65	180.08	5.030	
10,472.15	5,675.00	5,711.06	5,710.70	58.19	122.77	-91.12	390.74	4,204.79	902.85	721.91	180.94	4.990 CC, ES	
10,500.00	5,675.00	5,711.06	5,710.70	58.48	122.77	-91.12	390.74	4,204.79	903.28	722.10	181.18	4.985 SF	
10,600.00	5,675.00	5,711.05	5,710.69	59.53	122.77	-91.12	390.74	4,204.79	911.86	730.20	181.66	5.020	
10,700.00	5,675.00	5,711.04	5,710.68	60.59	122.77	-91.12	390.74	4,204.79	931.16	749.63	181.53	5.130	
10,800.00	5,675.00	5,711.04	5,710.68	61.64	122.77	-91.12	390.74	4,204.79	960.54	779.68	180.86	5.311	
10,900.00	5,675.00	5,711.03	5,710.67	62.70	122.77	-91.12	390.74	4,204.79	999.10	819.33	179.77	5.558	
11,000.00	5,675.00	5,711.02	5,710.66	63.77	122.77	-91.12	390.74	4,204.79	1,045.84	867.44	178.39	5.863	
11,100.00	5,675.00	5,711.02	5,710.66	64.83	122.77	-91.12	390.74	4,204.79	1,099.70	922.86	176.84	6.219	
11,200.00	5,675.00	5,711.01	5,710.65	65.90	122.77	-91.12	390.74	4,204.79	1,159.70	984.50	175.20	6.619	
11,300.00	5,675.00	5,711.00	5,710.64	66.96	122.77	-91.12	390.74	4,204.79	1,224.94	1,051.38	173.56	7.058	
11,400.00	5,675.00	5,711.00	5,710.64	68.03	122.77	-91.12	390.74	4,204.79	1,294.63	1,122.67	171.96	7.529	
11,431.20	5,675.00	5,710.99	5,710.64	68.37	122.77	-91.12	390.74	4,204.79	1,317.16	1,145.70	171.47	7.682	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: TESORO 20 FEDERAL COM - 70H - Wellbore #1 - PERMIT													Offset Site Error:
Survey Program: 0-MWD+IFR1+SAG+FDIR													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	20.00				
100.00	100.00	100.00	100.00	0.29	0.14	0.00	20.00	0.00	20.00	19.57	0.43	46.494	
200.00	200.00	200.00	200.00	0.65	0.50	0.00	20.00	0.00	20.00	18.85	1.15	17.435	
300.00	300.00	300.00	300.00	1.00	0.86	0.00	20.00	0.00	20.00	18.14	1.86	10.729 CC, ES	
400.00	399.98	399.89	399.87	1.35	1.21	108.69	20.26	-1.72	20.83	18.26	2.56	8.122	
500.00	499.84	499.74	499.57	1.70	1.57	108.13	21.05	-6.88	23.31	20.05	3.26	7.147	
600.00	599.45	599.50	598.95	2.05	1.92	107.42	22.36	-15.46	27.45	23.48	3.97	6.913 SF	
700.00	698.70	699.14	697.85	2.41	2.28	106.71	24.18	-27.44	33.24	28.55	4.69	7.089	
800.00	797.47	798.62	796.11	2.77	2.65	106.07	26.52	-42.79	40.67	35.25	5.42	7.508	
900.00	895.62	897.90	893.57	3.14	3.01	105.51	29.36	-61.46	49.73	43.58	6.15	8.080	
1,000.00	993.06	996.95	990.09	3.52	3.39	105.04	32.70	-83.40	60.41	53.51	6.91	8.749	
1,100.00	1,089.87	1,095.90	1,085.74	3.91	3.77	104.24	36.52	-108.45	72.43	64.77	7.67	9.448	
1,200.00	1,186.65	1,195.13	1,181.45	4.30	4.16	103.26	40.47	-134.37	84.69	76.25	8.44	10.035	
1,300.00	1,283.44	1,294.37	1,277.16	4.69	4.55	102.52	44.42	-160.29	96.97	87.75	9.22	10.518	
1,400.00	1,380.22	1,393.61	1,372.87	5.09	4.94	101.95	48.37	-186.21	109.25	99.25	10.00	10.922	
1,500.00	1,477.00	1,492.85	1,468.58	5.49	5.34	101.50	52.31	-212.13	121.55	110.76	10.79	11.264	
1,600.00	1,573.78	1,592.08	1,564.29	5.89	5.74	101.13	56.26	-238.05	133.85	122.27	11.58	11.558	
1,700.00	1,670.56	1,691.32	1,660.00	6.29	6.14	100.82	60.21	-263.97	146.16	133.79	12.37	11.811	
1,800.00	1,767.35	1,790.56	1,755.71	6.69	6.54	100.56	64.16	-289.90	158.47	145.30	13.17	12.033	
1,900.00	1,864.13	1,889.79	1,851.42	7.10	6.94	100.33	68.11	-315.82	170.78	156.82	13.97	12.228	
2,000.00	1,960.91	1,989.03	1,947.13	7.50	7.34	100.14	72.06	-341.74	183.10	168.34	14.76	12.402	
2,100.00	2,057.69	2,088.27	2,042.84	7.90	7.74	99.97	76.01	-367.66	195.42	179.85	15.56	12.556	
2,200.00	2,154.47	2,187.50	2,138.55	8.31	8.14	99.82	79.96	-393.58	207.74	191.37	16.36	12.695	
2,300.00	2,251.26	2,286.74	2,234.26	8.71	8.55	99.69	83.90	-419.50	220.06	202.89	17.16	12.820	
2,400.00	2,348.04	2,385.98	2,329.98	9.12	8.95	99.57	87.85	-445.42	232.38	214.41	17.97	12.934	
2,500.00	2,444.82	2,485.21	2,425.69	9.52	9.35	99.46	91.80	-471.34	244.70	225.93	18.77	13.038	
2,600.00	2,541.62	2,584.34	2,521.29	9.93	9.76	104.86	95.75	-497.24	257.86	238.29	19.57	13.176	
2,699.99	2,638.44	2,682.97	2,616.41	10.33	10.16	112.34	99.67	-523.00	274.21	253.84	20.37	13.463	
2,800.00	2,735.22	2,781.27	2,711.22	10.74	10.56	112.57	103.58	-548.68	292.48	271.32	21.16	13.823	
2,900.00	2,832.01	2,879.57	2,806.02	11.14	10.96	112.21	107.49	-574.35	310.78	288.83	21.95	14.159	
3,000.00	2,928.79	2,977.86	2,900.83	11.54	11.36	111.89	111.40	-600.03	329.08	306.34	22.74	14.471	
3,100.00	3,025.57	3,076.16	2,995.63	11.95	11.76	111.61	115.32	-625.70	347.40	323.86	23.53	14.762	
3,200.00	3,122.35	3,174.45	3,090.43	12.35	12.16	111.35	119.23	-651.38	365.72	341.39	24.32	15.035	
3,300.00	3,219.14	3,272.75	3,185.23	12.76	12.56	111.12	123.14	-677.05	384.04	358.93	25.12	15.290	
3,400.00	3,315.92	3,371.04	3,280.03	13.16	12.97	110.91	127.05	-702.73	402.38	376.47	25.91	15.530	
3,500.00	3,412.70	3,469.34	3,374.84	13.57	13.37	110.72	130.96	-728.40	420.72	394.01	26.70	15.756	
3,600.00	3,509.48	3,567.63	3,469.64	13.97	13.77	110.54	134.87	-754.08	439.06	411.56	27.50	15.968	
3,700.00	3,606.27	3,665.93	3,564.44	14.38	14.17	110.38	138.78	-779.75	457.40	429.11	28.29	16.168	
3,800.00	3,703.05	3,764.22	3,659.24	14.78	14.57	110.23	142.69	-805.43	475.75	446.67	29.08	16.358	
3,900.00	3,799.83	3,862.52	3,754.04	15.19	14.97	110.09	146.60	-831.10	494.10	464.23	29.88	16.537	
4,000.00	3,896.61	3,960.81	3,848.84	15.60	15.38	109.96	150.52	-856.78	512.46	481.79	30.67	16.708	
4,100.00	3,993.40	4,065.87	3,950.55	16.00	15.80	110.00	154.68	-882.68	530.51	498.99	31.51	16.835	
4,200.00	4,090.18	4,177.43	4,060.74	16.41	16.21	111.21	158.99	-899.14	546.44	514.09	32.35	16.892	
4,300.00	4,186.96	4,285.88	4,169.00	16.82	16.56	113.55	162.99	-902.72	560.57	527.47	33.10	16.936	
4,400.00	4,283.74	4,388.73	4,271.44	17.23	16.85	116.76	166.58	-894.76	574.14	540.39	33.75	17.011	
4,500.00	4,380.53	4,484.25	4,365.29	17.63	17.10	120.52	169.68	-877.53	588.75	554.44	34.31	17.158	
4,600.00	4,477.31	4,571.50	4,449.15	18.04	17.32	125.35	172.31	-853.67	606.11	571.35	34.76	17.435	
4,700.00	4,575.17	4,653.31	4,525.49	18.43	17.52	148.61	174.56	-824.43	626.81	591.74	35.08	17.869	
4,800.00	4,674.18	4,732.42	4,596.68	18.77	17.70	-168.06	176.53	-790.04	649.89	614.63	35.26	18.434	
4,900.00	4,773.25	4,809.29	4,662.91	19.07	17.88	-122.85	178.25	-751.09	674.43	639.13	35.30	19.104	
5,000.00	4,871.30	4,884.27	4,724.29	19.33	18.06	-98.88	179.71	-708.09	699.62	664.37	35.25	19.848	
5,100.00	4,967.25	4,957.65	4,780.92	19.57	18.24	-85.95	180.93	-661.46	724.71	689.60	35.11	20.639	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: TESORO 20 FEDERAL COM - 70H - Wellbore #1 - PERMIT													Offset Site Error:
Survey Program: 0-MWD+IFR1+SAG+FDIR													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.00	5,060.05	5,029.67	4,832.86	19.79	18.42	-77.65	181.93	-611.61	749.09	714.17	34.92	21.451	
5,300.00	5,148.68	5,100.00	4,879.83	20.00	18.61	-71.70	182.70	-559.29	772.22	737.53	34.69	22.263	
5,400.00	5,232.18	5,170.39	4,922.85	20.19	18.81	-67.13	183.26	-503.60	793.63	759.17	34.45	23.035	
5,500.00	5,309.62	5,239.40	4,960.94	20.38	19.02	-63.52	183.62	-446.08	812.95	778.72	34.23	23.753	
5,600.00	5,380.17	5,326.37	5,004.69	20.57	19.30	-60.47	183.86	-370.91	829.15	794.91	34.24	24.215	
5,700.00	5,443.04	5,425.07	5,054.04	20.77	19.67	-58.39	184.12	-285.43	839.34	804.79	34.55	24.293	
5,799.99	5,497.55	5,500.00	5,090.48	20.98	19.96	-57.31	184.32	-219.98	843.84	809.06	34.79	24.258	
5,900.00	5,547.55	5,550.00	5,110.69	21.24	20.17	-57.00	184.46	-174.26	849.72	814.92	34.80	24.421	
5,999.99	5,597.55	5,600.00	5,126.84	21.54	20.38	-56.45	184.61	-126.96	860.98	826.23	34.75	24.778	
6,100.00	5,639.98	5,650.00	5,138.80	21.86	20.59	-54.86	184.75	-78.43	872.98	838.19	34.78	25.097	
6,200.00	5,666.06	5,700.00	5,146.49	22.21	20.79	-53.88	184.91	-29.04	880.43	845.34	35.08	25.094	
6,299.99	5,675.00	5,763.47	5,150.00	22.54	21.05	-53.51	185.10	34.30	882.86	847.21	35.65	24.766	
6,400.00	5,675.00	5,862.43	5,150.00	22.90	21.47	-53.51	185.40	133.26	882.86	846.50	36.36	24.281	
6,500.00	5,675.00	5,962.43	5,150.00	23.32	21.94	-53.51	185.71	233.26	882.86	845.71	37.15	23.763	
6,600.00	5,675.00	6,062.43	5,150.00	23.78	22.46	-53.51	186.01	333.26	882.86	844.84	38.02	23.219	
6,700.00	5,675.00	6,162.43	5,150.00	24.29	23.02	-53.51	186.32	433.25	882.86	843.90	38.97	22.657	
6,800.00	5,675.00	6,262.43	5,150.00	24.84	23.63	-53.51	186.63	533.25	882.86	842.88	39.98	22.083	
6,900.00	5,675.00	6,362.43	5,150.00	25.43	24.27	-53.51	186.93	633.25	882.86	841.81	41.06	21.504	
7,000.00	5,675.00	6,462.43	5,150.00	26.06	24.94	-53.51	187.24	733.25	882.86	840.67	42.19	20.926	
7,100.00	5,675.00	6,562.43	5,150.00	26.72	25.65	-53.51	187.55	833.25	882.86	839.48	43.38	20.353	
7,200.00	5,675.00	6,662.43	5,150.00	27.41	26.38	-53.51	187.85	933.25	882.86	838.25	44.62	19.788	
7,300.00	5,675.00	6,762.43	5,150.00	28.13	27.15	-53.51	188.16	1,033.25	882.86	836.96	45.90	19.235	
7,400.00	5,675.00	6,862.43	5,150.00	28.88	27.94	-53.51	188.46	1,133.25	882.86	835.64	47.22	18.695	
7,500.00	5,675.00	6,962.43	5,150.00	29.66	28.75	-53.51	188.77	1,233.25	882.86	834.27	48.59	18.170	
7,600.00	5,675.00	7,062.43	5,150.00	30.45	29.58	-53.51	189.08	1,333.25	882.86	832.88	49.99	17.662	
7,700.00	5,675.00	7,162.43	5,150.00	31.27	30.43	-53.51	189.38	1,433.25	882.86	831.44	51.42	17.170	
7,800.00	5,675.00	7,262.43	5,150.00	32.10	31.29	-53.51	189.69	1,533.25	882.86	829.98	52.88	16.696	
7,900.00	5,675.00	7,362.43	5,150.00	32.95	32.18	-53.51	189.99	1,633.25	882.86	828.49	54.37	16.238	
8,000.00	5,675.00	7,462.43	5,150.00	33.82	33.08	-53.51	190.30	1,733.25	882.86	826.98	55.88	15.799	
8,100.00	5,675.00	7,562.43	5,150.00	34.70	33.99	-53.51	190.61	1,833.25	882.86	825.44	57.42	15.376	
8,200.00	5,675.00	7,662.43	5,150.00	35.60	34.91	-53.51	190.91	1,933.25	882.86	823.89	58.98	14.969	
8,300.00	5,675.00	7,762.43	5,150.00	36.51	35.85	-53.51	191.22	2,033.25	882.86	822.31	60.56	14.579	
8,400.00	5,675.00	7,862.43	5,150.00	37.43	36.80	-53.51	191.52	2,133.25	882.86	820.71	62.15	14.205	
8,500.00	5,675.00	7,962.43	5,150.00	38.37	37.76	-53.51	191.83	2,233.25	882.86	819.10	63.77	13.845	
8,600.00	5,675.00	8,062.43	5,150.00	39.31	38.72	-53.51	192.14	2,333.25	882.86	817.47	65.39	13.501	
8,700.00	5,675.00	8,162.43	5,150.00	40.26	39.70	-53.51	192.44	2,433.25	882.86	815.82	67.04	13.170	
8,800.00	5,675.00	8,262.43	5,150.00	41.22	40.68	-53.51	192.75	2,533.24	882.86	814.17	68.69	12.852	
8,900.00	5,675.00	8,362.43	5,150.00	42.19	41.67	-53.51	193.05	2,633.24	882.86	812.50	70.36	12.547	
9,000.00	5,675.00	8,462.43	5,150.00	43.17	42.67	-53.51	193.36	2,733.24	882.86	810.82	72.05	12.254	
9,100.00	5,675.00	8,562.43	5,150.00	44.15	43.67	-53.51	193.67	2,833.24	882.86	809.13	73.74	11.973	
9,200.00	5,675.00	8,662.43	5,150.00	45.14	44.68	-53.51	193.97	2,933.24	882.86	807.42	75.44	11.703	
9,300.00	5,675.00	8,762.43	5,150.00	46.14	45.69	-53.51	194.28	3,033.24	882.86	805.71	77.15	11.443	
9,400.00	5,675.00	8,862.43	5,150.00	47.15	46.71	-53.51	194.58	3,133.24	882.86	803.99	78.87	11.194	
9,500.00	5,675.00	8,962.43	5,150.00	48.15	47.74	-53.51	194.89	3,233.24	882.86	802.26	80.60	10.954	
9,600.00	5,675.00	9,062.43	5,150.00	49.17	48.77	-53.51	195.20	3,333.24	882.86	800.53	82.34	10.723	
9,700.00	5,675.00	9,162.43	5,150.00	50.19	49.80	-53.51	195.50	3,433.24	882.86	798.78	84.08	10.500	
9,800.00	5,675.00	9,262.43	5,150.00	51.21	50.84	-53.51	195.81	3,533.24	882.86	797.03	85.83	10.286	
9,900.00	5,675.00	9,362.43	5,150.00	52.24	51.88	-53.51	196.11	3,633.24	882.86	795.28	87.59	10.080	
10,000.00	5,675.00	9,462.43	5,150.00	53.27	52.92	-53.51	196.42	3,733.24	882.86	793.52	89.35	9.881	
10,100.00	5,675.00	9,562.43	5,150.00	54.31	53.97	-53.51	196.73	3,833.24	882.86	791.75	91.12	9.689	
10,200.00	5,675.00	9,662.43	5,150.00	55.34	55.02	-53.51	197.03	3,933.24	882.86	789.97	92.89	9.504	
10,300.00	5,675.00	9,762.43	5,150.00	56.39	56.08	-53.51	197.34	4,033.24	882.86	788.19	94.67	9.326	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: TESORO 20 FEDERAL COM - 70H - Wellbore #1 - PERMIT												Offset Site Error:	0.00 usft
Survey Program:		0-MWD+IFR1+SAG+FDIR				Rule Assigned:				Offset Well Error:	0.00 usft		
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance		Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,400.00	5,675.00	9,862.43	5,150.00	57.43	57.14	-53.51	197.64	4,133.24	882.86	786.41	96.45	9.153	
10,500.00	5,675.00	9,962.43	5,150.00	58.48	58.19	-53.51	197.95	4,233.24	882.86	784.62	98.24	8.987	
10,600.00	5,675.00	10,062.43	5,150.00	59.53	59.26	-53.51	198.26	4,333.24	882.86	782.83	100.03	8.826	
10,700.00	5,675.00	10,162.43	5,150.00	60.59	60.32	-53.51	198.56	4,433.24	882.86	781.03	101.83	8.670	
10,800.00	5,675.00	10,262.43	5,150.00	61.64	61.39	-53.51	198.87	4,533.24	882.86	779.23	103.63	8.519	
10,900.00	5,675.00	10,362.43	5,150.00	62.70	62.46	-53.51	199.17	4,633.23	882.86	777.43	105.43	8.374	
11,000.00	5,675.00	10,462.43	5,150.00	63.77	63.53	-53.51	199.48	4,733.23	882.86	775.62	107.24	8.233	
11,100.00	5,675.00	10,562.43	5,150.00	64.83	64.60	-53.51	199.79	4,833.23	882.86	773.81	109.05	8.096	
11,200.00	5,675.00	10,662.43	5,150.00	65.90	65.68	-53.51	200.09	4,933.23	882.86	772.00	110.86	7.963	
11,300.00	5,675.00	10,762.43	5,150.00	66.96	66.75	-53.51	200.40	5,033.23	882.86	770.18	112.68	7.835	
11,400.00	5,675.00	10,862.43	5,150.00	68.03	67.83	-53.51	200.71	5,133.23	882.86	768.36	114.50	7.711	
11,430.08	5,675.00	10,892.51	5,150.00	68.35	68.15	-53.51	200.80	5,163.31	882.86	767.82	115.05	7.674	
11,431.20	5,675.00	10,893.39	5,150.00	68.37	68.16	-53.51	200.80	5,164.20	882.86	767.80	115.06	7.673	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: TESORO 20 FEDERAL COM - 71H - Wellbore #1 - PERMIT													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR		Reference Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	180.00	-20.00	0.00	20.00				
100.00	100.00	100.00	100.00	0.29	0.14	180.00	-20.00	0.00	20.00	19.57	0.43	46.494	
200.00	200.00	200.00	200.00	0.65	0.50	180.00	-20.00	0.00	20.00	18.85	1.15	17.435	
300.00	300.00	300.00	300.00	1.00	0.86	180.00	-20.00	0.00	20.00	18.14	1.86	10.729 CC, ES	
400.00	399.98	399.43	399.41	1.35	1.20	-72.76	-21.38	-1.03	20.84	18.28	2.56	8.139	
500.00	499.84	498.80	498.64	1.70	1.55	-77.02	-25.53	-4.12	23.43	20.18	3.25	7.210	
600.00	599.45	598.05	597.51	2.05	1.90	-82.29	-32.42	-9.26	27.97	24.02	3.95	7.079	
700.00	698.70	697.11	695.84	2.41	2.25	-87.25	-42.03	-16.42	34.59	29.93	4.66	7.421	
800.00	797.47	795.93	793.45	2.77	2.60	-91.32	-54.33	-25.59	43.33	37.95	5.38	8.055	
900.00	895.62	894.44	890.18	3.14	2.97	-94.45	-69.27	-36.72	54.19	48.08	6.11	8.869	
1,000.00	993.06	992.60	985.87	3.52	3.34	-96.78	-86.80	-49.79	67.12	60.26	6.85	9.796	
1,100.00	1,089.87	1,090.37	1,080.38	3.91	3.72	-98.10	-106.87	-64.74	81.94	74.34	7.60	10.777	
1,200.00	1,186.65	1,187.71	1,173.57	4.30	4.11	-97.37	-129.40	-81.54	98.25	89.89	8.36	11.752	
1,300.00	1,283.44	1,284.44	1,265.18	4.69	4.51	-95.37	-154.29	-100.09	116.09	106.97	9.12	12.736	
1,400.00	1,380.22	1,382.57	1,357.60	5.09	4.92	-93.29	-180.74	-119.80	134.81	124.93	9.89	13.635	
1,500.00	1,477.00	1,480.70	1,450.01	5.49	5.33	-91.71	-207.20	-139.52	153.67	143.01	10.66	14.410	
1,600.00	1,573.78	1,578.83	1,542.43	5.89	5.75	-90.48	-233.65	-159.24	172.62	161.17	11.44	15.083	
1,700.00	1,670.56	1,676.96	1,634.85	6.29	6.17	-89.49	-260.10	-178.95	191.62	179.39	12.23	15.671	
1,800.00	1,767.35	1,775.09	1,727.26	6.69	6.60	-88.68	-286.55	-198.67	210.67	197.66	13.01	16.189	
1,900.00	1,864.13	1,873.21	1,819.68	7.10	7.03	-88.00	-313.01	-218.38	229.76	215.96	13.80	16.647	
2,000.00	1,960.91	1,971.34	1,912.10	7.50	7.45	-87.43	-339.46	-238.10	248.87	234.28	14.59	17.056	
2,100.00	2,057.69	2,069.47	2,004.51	7.90	7.88	-86.94	-365.91	-257.81	268.00	252.62	15.38	17.423	
2,200.00	2,154.47	2,167.60	2,096.93	8.31	8.32	-86.52	-392.37	-277.53	287.15	270.98	16.18	17.753	
2,300.00	2,251.26	2,265.73	2,189.35	8.71	8.75	-86.15	-418.82	-297.25	306.32	289.35	16.97	18.052	
2,400.00	2,348.04	2,363.86	2,281.76	9.12	9.18	-85.82	-445.27	-316.96	325.49	307.73	17.76	18.323	
2,500.00	2,444.82	2,461.99	2,374.18	9.52	9.61	-85.53	-471.73	-336.68	344.67	326.11	18.56	18.572	
2,600.00	2,541.62	2,560.27	2,466.74	9.93	10.05	-79.80	-498.22	-356.42	363.01	343.65	19.35	18.757	
2,699.99	2,638.44	2,659.08	2,559.80	10.33	10.48	-71.77	-524.86	-376.28	378.12	357.98	20.15	18.769	
2,800.00	2,735.22	2,758.18	2,653.13	10.74	10.92	-70.74	-551.57	-396.19	391.30	370.37	20.94	18.688	
2,900.00	2,832.01	2,857.27	2,746.45	11.14	11.36	-70.37	-578.28	-416.10	404.49	382.76	21.73	18.612	
3,000.00	2,928.79	2,956.37	2,839.78	11.54	11.80	-70.01	-605.00	-436.01	417.69	395.17	22.53	18.542	
3,100.00	3,025.57	3,055.46	2,933.10	11.95	12.24	-69.68	-631.71	-455.92	430.91	407.59	23.32	18.478	
3,200.00	3,122.35	3,154.55	3,026.43	12.35	12.68	-69.37	-658.42	-475.83	444.14	420.03	24.11	18.418	
3,300.00	3,219.14	3,253.65	3,119.75	12.76	13.12	-69.08	-685.14	-495.74	457.38	432.47	24.91	18.363	
3,400.00	3,315.92	3,352.74	3,213.08	13.16	13.57	-68.80	-711.85	-515.65	470.64	444.93	25.70	18.312	
3,500.00	3,412.70	3,451.83	3,306.40	13.57	14.01	-68.54	-738.56	-535.55	483.90	457.40	26.50	18.264	
3,600.00	3,509.48	3,550.92	3,399.72	13.97	14.45	-68.29	-765.27	-555.46	497.17	469.88	27.29	18.219	
3,700.00	3,606.27	3,650.02	3,493.05	14.38	14.89	-68.05	-791.99	-575.37	510.45	482.37	28.08	18.177	
3,800.00	3,703.05	3,749.11	3,586.37	14.78	15.33	-67.83	-818.70	-595.28	523.74	494.87	28.88	18.138	
3,900.00	3,799.83	3,848.20	3,679.70	15.19	15.77	-67.62	-845.41	-615.19	537.04	507.37	29.67	18.101	
4,000.00	3,896.61	3,947.29	3,773.02	15.60	16.22	-67.41	-872.13	-635.10	550.35	519.88	30.46	18.066	
4,100.00	3,993.40	4,046.39	3,866.35	16.00	16.66	-67.22	-898.84	-655.01	563.66	532.40	31.26	18.033	
4,200.00	4,090.18	4,145.48	3,959.67	16.41	17.10	-67.04	-925.55	-674.92	576.97	544.92	32.05	18.002	
4,300.00	4,186.96	4,244.57	4,052.99	16.82	17.54	-66.86	-952.26	-694.83	590.30	557.45	32.84	17.973	
4,400.00	4,283.74	4,343.67	4,146.32	17.23	17.99	-66.70	-978.98	-714.74	603.62	569.99	33.64	17.945	
4,500.00	4,380.53	4,442.76	4,239.64	17.63	18.43	-66.54	-1,005.69	-734.65	616.96	582.52	34.43	17.919	
4,600.00	4,477.31	4,541.85	4,332.97	18.04	18.87	-65.68	-1,032.40	-754.56	630.29	595.07	35.22	17.894	
4,700.00	4,575.17	4,640.08	4,425.51	18.43	19.31	-47.56	-1,058.87	-774.16	643.03	607.08	35.96	17.884	
4,800.00	4,674.18	4,735.18	4,516.57	18.77	19.71	-8.88	-1,083.69	-785.29	655.18	618.60	36.58	17.911	
4,900.00	4,773.25	4,831.52	4,609.90	19.07	20.06	31.82	-1,107.21	-783.85	666.80	629.65	37.15	17.951	
5,000.00	4,871.30	4,928.65	4,703.42	19.33	20.36	51.44	-1,128.83	-769.48	677.66	640.00	37.66	17.995	
5,100.00	4,967.25	5,026.09	4,794.93	19.57	20.60	60.21	-1,148.03	-742.30	687.62	649.50	38.13	18.034	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: TESORO 20 FEDERAL COM - 71H - Wellbore #1 - PERMIT													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HFR1+SAG+FDIR		Reference Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,200.00	5,060.05	5,123.35	4,882.26	19.79	20.81	64.53	-1,164.33	-702.92	696.57	658.01	38.56	18.066	
5,300.00	5,148.68	5,219.92	4,963.44	20.00	20.97	66.71	-1,177.41	-652.42	704.44	665.50	38.94	18.089	
5,400.00	5,232.18	5,315.32	5,036.77	20.19	21.09	67.68	-1,187.04	-592.28	711.24	671.95	39.29	18.102	
5,500.00	5,309.62	5,409.13	5,100.97	20.38	21.18	67.90	-1,193.17	-524.23	716.99	677.39	39.60	18.107	
5,600.00	5,380.17	5,500.00	5,154.62	20.57	21.25	67.63	-1,195.84	-451.02	721.75	681.89	39.86	18.108	
5,700.00	5,443.04	5,596.77	5,203.74	20.77	21.30	67.10	-1,195.84	-367.65	725.36	685.18	40.18	18.053	
5,799.99	5,497.55	5,696.57	5,253.64	20.98	21.36	67.19	-1,195.57	-281.22	726.69	686.05	40.64	17.882	
5,900.00	5,547.55	5,776.47	5,292.32	21.24	21.42	67.09	-1,195.36	-211.33	727.53	686.55	40.99	17.751	
5,999.99	5,597.55	5,850.00	5,320.15	21.54	21.48	66.38	-1,195.16	-143.33	732.70	691.46	41.24	17.767	
6,100.00	5,639.98	5,900.00	5,333.99	21.86	21.52	65.24	-1,195.01	-95.30	739.17	697.87	41.31	17.895	
6,200.00	5,666.06	5,970.82	5,346.32	22.21	21.57	64.39	-1,194.80	-25.61	743.18	701.53	41.65	17.842	
6,299.99	5,675.00	6,035.77	5,350.00	22.54	21.63	64.12	-1,194.60	39.20	744.58	702.50	42.08	17.694	
6,333.33	5,675.07	6,067.36	5,350.00	22.66	21.66	64.12	-1,194.50	70.79	744.61	702.30	42.31	17.601	
6,400.00	5,675.00	6,134.03	5,350.00	22.90	21.75	64.12	-1,194.30	137.47	744.58	701.79	42.79	17.402	
6,500.00	5,675.00	6,234.03	5,350.00	23.32	21.95	64.12	-1,194.00	237.47	744.58	701.00	43.58	17.084	
6,600.00	5,675.00	6,334.03	5,350.00	23.78	22.26	64.12	-1,193.69	337.46	744.58	700.12	44.46	16.747	
6,700.00	5,675.00	6,434.03	5,350.00	24.29	22.67	64.12	-1,193.39	437.46	744.59	699.17	45.41	16.395	
6,800.00	5,675.00	6,534.03	5,350.00	24.84	23.16	64.12	-1,193.08	537.46	744.59	698.15	46.44	16.033	
6,900.00	5,675.00	6,634.03	5,350.00	25.43	23.72	64.12	-1,192.78	637.46	744.59	697.06	47.53	15.665	
7,000.00	5,675.00	6,734.03	5,350.00	26.06	24.33	64.12	-1,192.48	737.46	744.59	695.90	48.69	15.293	
7,100.00	5,675.00	6,834.03	5,350.00	26.72	24.98	64.12	-1,192.17	837.46	744.59	694.69	49.90	14.922	
7,200.00	5,675.00	6,934.03	5,350.00	27.41	25.68	64.12	-1,191.87	937.46	744.59	693.43	51.17	14.552	
7,300.00	5,675.00	7,034.03	5,350.00	28.13	26.40	64.12	-1,191.56	1,037.46	744.60	692.11	52.49	14.187	
7,400.00	5,675.00	7,134.03	5,350.00	28.88	27.16	64.12	-1,191.26	1,137.46	744.60	690.75	53.85	13.827	
7,500.00	5,675.00	7,234.03	5,350.00	29.66	27.94	64.12	-1,190.96	1,237.46	744.60	689.34	55.26	13.475	
7,600.00	5,675.00	7,334.03	5,350.00	30.45	28.75	64.12	-1,190.65	1,337.46	744.60	687.90	56.70	13.131	
7,700.00	5,675.00	7,434.03	5,350.00	31.27	29.57	64.12	-1,190.35	1,437.46	744.60	686.42	58.19	12.797	
7,800.00	5,675.00	7,534.03	5,350.00	32.10	30.42	64.12	-1,190.04	1,537.46	744.60	684.90	59.71	12.471	
7,900.00	5,675.00	7,634.03	5,350.00	32.95	31.29	64.12	-1,189.74	1,637.46	744.61	683.35	61.25	12.156	
8,000.00	5,675.00	7,734.03	5,350.00	33.82	32.17	64.12	-1,189.44	1,737.46	744.61	681.77	62.83	11.850	
8,100.00	5,675.00	7,834.03	5,350.00	34.70	33.07	64.12	-1,189.13	1,837.46	744.61	680.17	64.44	11.555	
8,200.00	5,675.00	7,934.03	5,350.00	35.60	33.98	64.12	-1,188.83	1,937.46	744.61	678.54	66.07	11.270	
8,300.00	5,675.00	8,034.03	5,350.00	36.51	34.90	64.12	-1,188.52	2,037.46	744.61	676.89	67.73	10.995	
8,400.00	5,675.00	8,134.03	5,350.00	37.43	35.83	64.12	-1,188.22	2,137.46	744.61	675.21	69.40	10.729	
8,500.00	5,675.00	8,234.03	5,350.00	38.37	36.78	64.12	-1,187.91	2,237.46	744.62	673.52	71.10	10.473	
8,600.00	5,675.00	8,334.03	5,350.00	39.31	37.74	64.12	-1,187.61	2,337.46	744.62	671.81	72.81	10.227	
8,700.00	5,675.00	8,434.03	5,350.00	40.26	38.70	64.12	-1,187.31	2,437.45	744.62	670.08	74.54	9.989	
8,800.00	5,675.00	8,534.03	5,350.00	41.22	39.67	64.12	-1,187.00	2,537.45	744.62	668.33	76.29	9.760	
8,900.00	5,675.00	8,634.03	5,350.00	42.19	40.65	64.12	-1,186.70	2,637.45	744.62	666.57	78.06	9.540	
9,000.00	5,675.00	8,734.03	5,350.00	43.17	41.64	64.12	-1,186.39	2,737.45	744.63	664.79	79.83	9.327	
9,100.00	5,675.00	8,834.03	5,350.00	44.15	42.64	64.12	-1,186.09	2,837.45	744.63	663.00	81.62	9.123	
9,200.00	5,675.00	8,934.03	5,350.00	45.14	43.64	64.12	-1,185.79	2,937.45	744.63	661.20	83.43	8.925	
9,300.00	5,675.00	9,034.03	5,350.00	46.14	44.65	64.12	-1,185.48	3,037.45	744.63	659.39	85.24	8.735	
9,400.00	5,675.00	9,134.03	5,350.00	47.15	45.66	64.12	-1,185.18	3,137.45	744.63	657.56	87.07	8.552	
9,500.00	5,675.00	9,234.03	5,350.00	48.15	46.68	64.12	-1,184.87	3,237.45	744.63	655.73	88.90	8.376	
9,600.00	5,675.00	9,334.03	5,350.00	49.17	47.70	64.12	-1,184.57	3,337.45	744.64	653.89	90.75	8.205	
9,700.00	5,675.00	9,434.03	5,350.00	50.19	48.73	64.12	-1,184.27	3,437.45	744.64	652.03	92.60	8.041	
9,800.00	5,675.00	9,534.03	5,350.00	51.21	49.76	64.12	-1,183.96	3,537.45	744.64	650.17	94.47	7.882	
9,900.00	5,675.00	9,634.03	5,350.00	52.24	50.80	64.12	-1,183.66	3,637.45	744.64	648.30	96.34	7.729	
10,000.00	5,675.00	9,734.03	5,350.00	53.27	51.84	64.12	-1,183.35	3,737.45	744.64	646.43	98.22	7.582	
10,100.00	5,675.00	9,834.03	5,350.00	54.31	52.88	64.12	-1,183.05	3,837.45	744.64	644.54	100.10	7.439	
10,200.00	5,675.00	9,934.03	5,350.00	55.34	53.93	64.12	-1,182.75	3,937.45	744.65	642.65	101.99	7.301	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SPUR ENERGY PARTNERS, LLC	Local Co-ordinate Reference:	Well 90H
Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Offset Design: TESORO 20 FEDERAL COM - 71H - Wellbore #1 - PERMIT													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Rule Assigned:		Distance		Minimum	Separation	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)		
10,300.00	5,675.00	10,034.03	5,350.00	56.39	54.98	64.12	-1,182.44	4,037.45	744.65	640.76	103.89	7.167	
10,400.00	5,675.00	10,134.03	5,350.00	57.43	56.03	64.12	-1,182.14	4,137.45	744.65	638.85	105.80	7.038	
10,500.00	5,675.00	10,234.03	5,350.00	58.48	57.09	64.12	-1,181.83	4,237.45	744.65	636.94	107.71	6.914	
10,600.00	5,675.00	10,334.03	5,350.00	59.53	58.15	64.12	-1,181.53	4,337.45	744.65	635.03	109.62	6.793	
10,700.00	5,675.00	10,434.03	5,350.00	60.59	59.21	64.12	-1,181.22	4,437.45	744.66	633.11	111.54	6.676	
10,800.00	5,675.00	10,534.03	5,350.00	61.64	60.27	64.12	-1,180.92	4,537.45	744.66	631.19	113.47	6.563	
10,900.00	5,675.00	10,634.03	5,350.00	62.70	61.34	64.12	-1,180.62	4,637.44	744.66	629.26	115.40	6.453	
11,000.00	5,675.00	10,734.03	5,350.00	63.77	62.41	64.12	-1,180.31	4,737.44	744.66	627.33	117.33	6.346	
11,100.00	5,675.00	10,834.03	5,350.00	64.83	63.48	64.12	-1,180.01	4,837.44	744.66	625.39	119.27	6.243	
11,200.00	5,675.00	10,934.03	5,350.00	65.90	64.55	64.12	-1,179.70	4,937.44	744.66	623.45	121.22	6.143	
11,300.00	5,675.00	11,034.03	5,350.00	66.96	65.62	64.12	-1,179.40	5,037.44	744.67	621.50	123.16	6.046	
11,400.00	5,675.00	11,134.03	5,350.00	68.03	66.70	64.12	-1,179.10	5,137.44	744.67	619.56	125.11	5.952	
11,431.20	5,675.00	11,165.23	5,350.00	68.37	67.03	64.12	-1,179.00	5,168.64	744.67	618.95	125.72	5.923 SF	

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Anticollision Report

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Reference Site:	TESORO 20 FEDERAL COM	MD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB = 20' @ 3658.00usft (AKITA 57) Coordinates are relative to: 90H

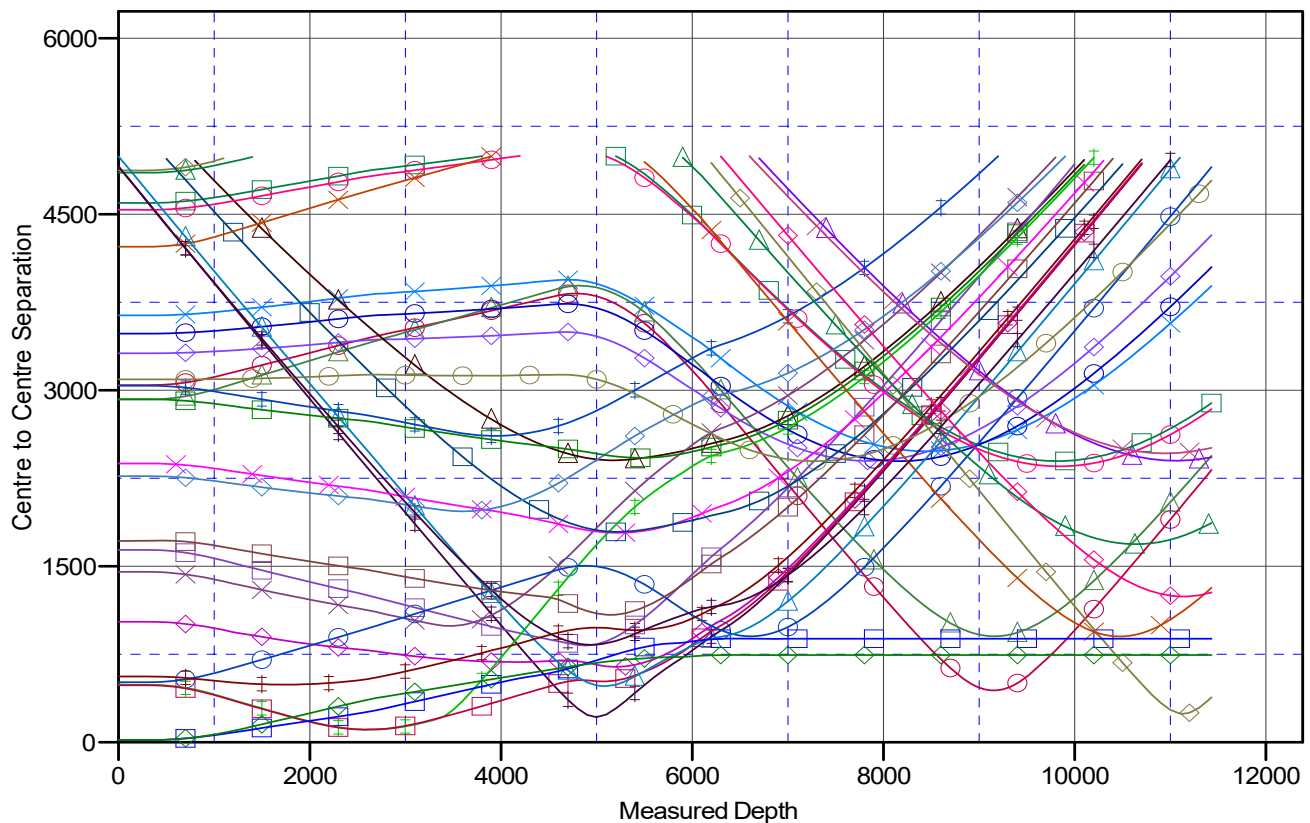
Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Central Meridian is -104.33334

Grid Convergence at Surface is: 0.18°

Ladder Plot



LEGEND

MCINTYRE A#8, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #242, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #964H, Wellbore #1, Wellbore #1 V0
THUNDER ROAD FEDERAL #8, Wellbore #1, Wellbore #1 V0	BURCH-FEDERAL A #6, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #225, Wellbore #1, Wellbore #1 V0
MCINTYRE E#8, Wellbore #1, Wellbore #1 V0	BURCH-FEDERAL A #10, Wellbore #1, Wellbore #1 V0	MCINTYRE A-FEDERAL #14, Wellbore #1, Wellbore #1 V0
MCINTYRE E-FEDERAL #5, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #361, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #270, Wellbore #1, Wellbore #1 V0
BURCH KEELY UNIT #192H, Wellbore #1, Wellbore #1 V0	MCINTYRE A#17, Wellbore #1, Wellbore #1 V0	MCINTYRE B#9, Wellbore #1, Wellbore #1 V0
THUNDER ROAD FEDERAL #7, Wellbore #1, Wellbore #1 V0	W.D. MCINTYRE C #8, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #962H, Wellbore #1, Wellbore #1 V0
BURCH KEELY UNIT 19 FEDERAL #196H, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #788, Wellbore #1, Wellbore #1 V0	MCINTYRE WD C #7, Wellbore #1, Wellbore #1 V0
MCINTYRE-FEDERAL A #4, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #964H, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #956H, Wellbore #1, Wellbore #1 V0
BURCH A #1, Wellbore #1, Wellbore #1 V0	JENKINS B-FEDERAL #18, Wellbore #1, Wellbore #1 V0	MCINTYRE A-EAST FEDERAL #20, Wellbore #1, Wellbore #1 V0
W.D. MCINTYRE A #7, Wellbore #1, Wellbore #1 V0	BURCH-FEDERAL A #11, Wellbore #1, Wellbore #1 V0	70H, Wellbore #1, PERMIT V0
BURCH KEELY UNIT #656, Wellbore #1, Wellbore #1 V0	W.D. MCINTYRE C #9, Wellbore #1, Wellbore #1 V0	71H, Wellbore #1, PERMIT V0

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

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Project:	EDDY COUNTY, NM (NAD 83 - NME)	TVD Reference:	RKB = 20' @ 3658.00usft (AKITA 57)
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Reference Well:	90H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.17 Single User Db
Reference Design:	PERMIT	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB = 20' @ 3658.00usft (AKITA 57) Coordinates are relative to: 90H

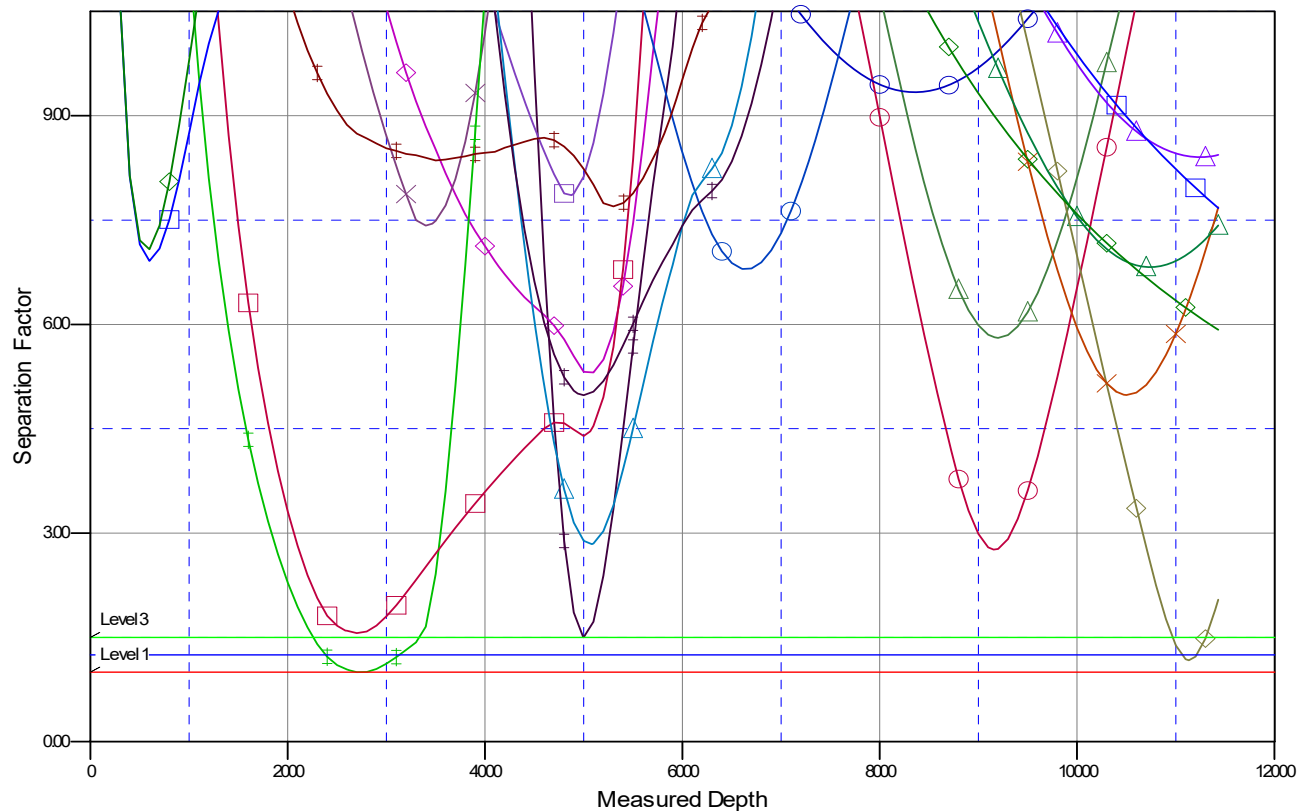
Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Central Meridian is -104.33334

Grid Convergence at Surface is: 0.18°

Separation Factor Plot



LEGEND

MCINTYRE A#8, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #242, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #964H, Wellbore #1, Wellbore #1 V0
THUNDER ROAD FEDERAL #8, Wellbore #1, Wellbore #1 V0	BURCH-FEDERAL A #6, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #225, Wellbore #1, Wellbore #1 V0
MCINTYRE E#8, Wellbore #1, Wellbore #1 V0	BURCH-FEDERAL A #10, Wellbore #1, Wellbore #1 V0	MCINTYRE A#FEDERAL #14, Wellbore #1, Wellbore #1 V0
MCINTYRE E#FEDERAL #5, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #361, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #270, Wellbore #1, Wellbore #1 V0
BURCH KEELY UNIT #192H, Wellbore #1, Wellbore #1 V0	MCINTYRE A#17, Wellbore #1, Wellbore #1 V0	MCINTYRE B#9, Wellbore #1, Wellbore #1 V0
THUNDER ROAD FEDERAL #7, Wellbore #1, Wellbore #1 V0	W.D. MCINTYRE C #8, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #962H, Wellbore #1, Wellbore #1 V0
BURCH KEELY UNIT 19 FEDERAL #196H, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #788, Wellbore #1, Wellbore #1 V0	MCINTYRE WD C #7, Wellbore #1, Wellbore #1 V0
MCINTYRE-FEDERAL A#4, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #989H, Wellbore #1, Wellbore #1 V0	BURCH KEELY UNIT #955H, Wellbore #1, Wellbore #1 V0
BURCH A #81, Wellbore #1, Wellbore #1 V0	JENKINS FEDERAL #18, Wellbore #1, Wellbore #1 V0	MCINTYRE A#EAST FEDERAL #20, Wellbore #1, Wellbore #1 V0
W.D. MCINTYRE A #7, Wellbore #1, Wellbore #1 V0	BURCH-FEDERAL A #11, Wellbore #1, Wellbore #1 V0	70H, Wellbore #1, PERMITV0
BURCH KEELY UNIT #656, Wellbore #1, Wellbore #1 V0	W.D. MCINTYRE C #9, Wellbore #1, Wellbore #1 V0	71H, Wellbore #1, PERMITV0

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Pecos District

Application for Permit to Drill

Conditions of Approval

Geology Concerns

Potash	☒ None	☐ Secretary	☐ R-111-P
Cave/Karst	☐ Medium	☐ High	☐ Critical
H2S	☐ None	☐ Below 100 PPM	☒ Above 100 PPM
Other	☐ 4 String Area	☐ Capitan Reef	☐ SWD Well

Note: The geology of the area where the well is being drilled determines the COAs that apply, not the above table.

Additional Engineering Requirements

Surface casing must be set at: 345 feet

Intermediate casing must be set at: 1,500 feet

General Requirements

1. Changes to the approved APD casing program need prior approval.
2. The Bureau of Land Management (BLM) will be notified in advance for a representative to witness:
 - a. Well spudding (minimum of 24 hours notice)
 - b. Setting and/or cementing of all casing strings (minimum of 4 hours notice)
 - c. BOPE tests (minimum of 4 hours notice)

Eddy County

620 East Greene Street, Carlsbad, NM 88220

(575) 361-2822

BLM_NM_CFO_DrillingNotifications@BLM.GOV

Lea County

414 West Taylor, Hobbs, NM 88240

(575) 689-5981

3. The initial wellhead installed on the well will remain on the well with spools used as needed.
4. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

- a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig:
 - i. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with a Spudder Rig:
 - i. Notify the BLM when moving in and removing the Spudder Rig.
 - ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - iii. BOP/BOPE test to be conducted per 43 CFR 3172.6 as soon as 2nd Rig is rigged up on well.
5. Floor controls are required for 3M or greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller, and will always be operational during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table or the area immediately above the substructure on which the draw works are located (this does not include the doghouse or stairway area).
6. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

Pressure Control

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR 3172.6 and API STD 53 Sec. 5.3.
2. 5M or higher systems require an HCR valve, remote kill line, and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE, and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

- d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
 - e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR 3172.6(b)(9).
 - f. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - g. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, no tests shall commence until the cement has had a minimum of 24 hours setup time.
 - h. The tests shall be done by an independent service company utilizing a test plug, not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to 43 CFR 3172 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
4. If the operator has proposed using a 5,000 (5M) Annular on a 10M BOP:
- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 10,000 (10M) psi.
5. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
- 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. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.
 - e. 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.
6. If a variance is approved for break testing the BOPE, the following requirements apply:
- a. BOPE break testing is only approved for a BOP rated at 5M or less.
 - b. Approval is only for the intermediate hole sections, so long as those sections do not go deeper than the Bone Springs formation.
 - c. The Annular Preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.
 - d. A full BOP test shall be performed every 21 days (at a minimum).
 - e. A full BOP test is required prior to drilling the first intermediate hole section (if applicable). If any subsequent intermediate hole interval is deeper than the first, a full BOP test shall be required (a maximum 200 foot difference in true vertical depth (TVD) is allowed).
 - f. BOPE break testing is not permitted for drilling the production hole section.
 - g. While in transfer, the BOP shall be secured by the hydraulic carrier or cradle.
 - h. If any repairs or replacements of the BOPE is required, the BOPE shall be tested as required by 43 CFR 3172.
 - i. Pressure tests shall be performed on any BOPE components that have been disconnected. A low pressure (250-300 psi) and a high pressure (BOP max pressure rating) test are required.
 - j. If a testing plug is used, pressure shall be maintained for at least 10 minutes. If there is any bleed off in pressure, the test shall be considered to have failed.
 - k. If no testing plug is used, pressure shall be maintained for at least 30 minutes. If there is a decline in pressure of more than 10 percent, the test shall be considered to have failed.
 - l. The appropriate Bureau of Land Management (BLM) office shall be notified a minimum of 4 hours before testing occurs.
 - m. Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
 - n. If break testing is not used, then a full BOPE test shall be conducted.
7. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply:
- a. The flex line must meet the requirements of API 16C.

- b. Check condition of flexible line from BOP to choke manifold (replace if exterior is damaged or if line fails test).
- c. Line is to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements.
- d. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating.
- e. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, shall be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

Casing and Cement

1. Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).
2. On any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. The formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
3. Provide compressive strengths (including hours to reach required 500 pounds compressive strength) prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
4. The surface casing shall be set at a minimum of 25 feet into the Rustler Anhydrite and 80 feet 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 24 hours in the Potash Area) 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.

5. Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.
6. Intermediate casing must be cemented to surface. For medium/high cave/karst, potash, and Capitan Reef, wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
7. The production cement should tie-back at least 200 feet (500 feet in Secretary Potash, surface in R-111-P potash) into previous casing string. Operator shall provide method of verification.
8. Production liner cement should tie-back at least 100 feet into previous casing string. Operator shall provide verification of cement top.
9. In WIPP Areas, cement must come to surface on the first three casing strings.
10. If cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
11. No pea gravel permitted for remedial cement or fall back remedial cement without prior authorization from a BLM petroleum engineer.
12. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
13. DV tools:
 - a. First stage to DV tool (The DV tool may be cancelled if cement circulates to surface on the first stage):
 - i. 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:
 - i. For intermediate casing, cement to surface.
 - ii. For production casing, cement should tie-back at least 200 feet (500 feet in Secretary Potash, surface in R-111-P potash) into previous casing string. Operator shall provide method of verification.
 - iii. If cement does not circulate, contact the appropriate BLM office.

14. Potash Areas:

- a. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
- b. After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met:
 - i. Cement reaches a minimum compressive strength of 500 psi for all cement blends
 - ii. Until cement has been in place at least 24 hours.
- c. WOC time will be recorded in the driller's log.
- d. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.
- e. In R111 Potash Areas, if cement does not circulate to surface on the first two salt protection casing strings, the cement on the 3rd casing salt string must come to surface.
- f. In Secretary Potash Areas, if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

15. Wait on cement (WOC) for Water Basin:

- a. After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met:
 - i. Cement reaches a minimum compressive strength of 500 psi at the shoe
 - ii. Until cement has been in place at least 8 hours.
- b. WOC time will be recorded in the driller's log.

16. Medium/High/Critical Cave/Karst Areas:

- a. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
- b. In Critical Cave/Karst Areas cement must come to surface on the first three casing strings.
- c. In Medium and High Cave/Karst Areas, if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- d. In Critical Cave/Karst Areas, if cement does not circulate to surface on the first three casing strings, the cement on the 4th casing string must come to surface.

Drilling Mud

1. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation and shall be used until production casing is run and cemented.

Waste Material and Fluids

1. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and

disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

2. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Special Requirements

1. Communitization Agreement
 - a. The operator will submit a Communitization Agreement to the Santa Fe Office (301 Dinosaur Trail, Santa Fe, NM 87508), 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.
 - b. 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.
 - i. The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
 - ii. 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.
 - c. In addition, the well sign shall include the surface and bottom hole lease numbers.
 - i. When the Communitization Agreement number is known, it shall also be on the sign.
2. Unit Wells
 - a. The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers.
 - i. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.
 - b. Commercial Well Determination
 - i. A commercial well determination shall be submitted after production has been established for at least six months (this is not necessary for secondary recovery unit wells).
3. Hydrogen Sulfide (H₂S)
 - a. If H₂S is encountered, provide measured values and formations to the BLM.
 - b. An H₂S area must meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items.

- c. An H2S Drilling Plan shall be activated 500 feet prior to drilling into any formation designated as having H2S.
 - d. Hydrogen Sulfide monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items.
- 4. Capitan Reef
 - a. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following (Use this for 3 string wells in the Capitan Reef, if it is a 4 string well ensure fresh water based mud is used across the Capitan interval):
 - i. 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.
 - ii. 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.
 - iii. The daily drilling report should show mud volume per shift/tour.
 - iv. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval.
 - v. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.
- 5. Salt Water Disposal Wells
 - a. The operator shall supply the BLM with a copy of a mudlog over the permitted disposal interval and estimated in situ water salinity based on open-hole logs.
 - b. If hydrocarbons are encountered while drilling, the operator shall notify the BLM.
 - c. The operator shall provide to the BLM a summary of formation depth picks based on mudlog and geophysical logs along with a copy of the mudlog and open-hole logs from total depth to top of Devonian.
 - d. An NOI sundry with the completion procedure for this well shall be submitted and approved prior to commencing completion work. The procedure will be reviewed to verify that the completion proposal will allow the operator to:
 - i. Properly evaluate the injection zone utilizing open-hole logs, swab testing and/or any other method to confirm that hydrocarbons cannot be produced in paying quantities. This evaluation shall be reviewed by the BLM prior to injection commencing.
 - ii. Restrict the injection fluid to the approved formation.
 - iii. If a step rate test will be run, an NOI sundry shall be submitted to the BLM for approval.

- e. If off-lease water will be disposed in this well, the operator shall provide proof of right-of-way approval.
6. WIPP Requirements
- a. If the proposed surface well or bottom hole is located within 330 feet of the WIPP Land Withdrawal Area boundary:
 - i. Daily drilling reports, logs, and deviation survey information are required to be submitted to the Bureau of Land Management Engineering Department and the U.S. Department of Energy (per requirements of the Joint Powers Agreement) until a total vertical depth of 7,000 feet is reached. These reports will have at a minimum the rate of penetration and a clearly marked section showing the deviation for each 500-foot interval. Operator may be required to do more frequent deviation surveys based on the daily information submitted and may be required to take other corrective measures.
 - ii. Information will also be provided to the New Mexico Oil Conservation Division after drilling activities have been completed.
 - iii. Upon completion of the well, the operator shall submit a complete directional survey.
 - iv. Any future entry into the well for purposes of completing additional drilling will require supplemental information.
 - b. Required information shall be emailed to OilGasReports@wipp.ws.
 - i. Attached files must not be greater than 20 MB.
 - ii. Call WIPP Tech Support at 575-234-7422, during the hours of 7:00am to 4:30pm, if there are any issues sending to this address.



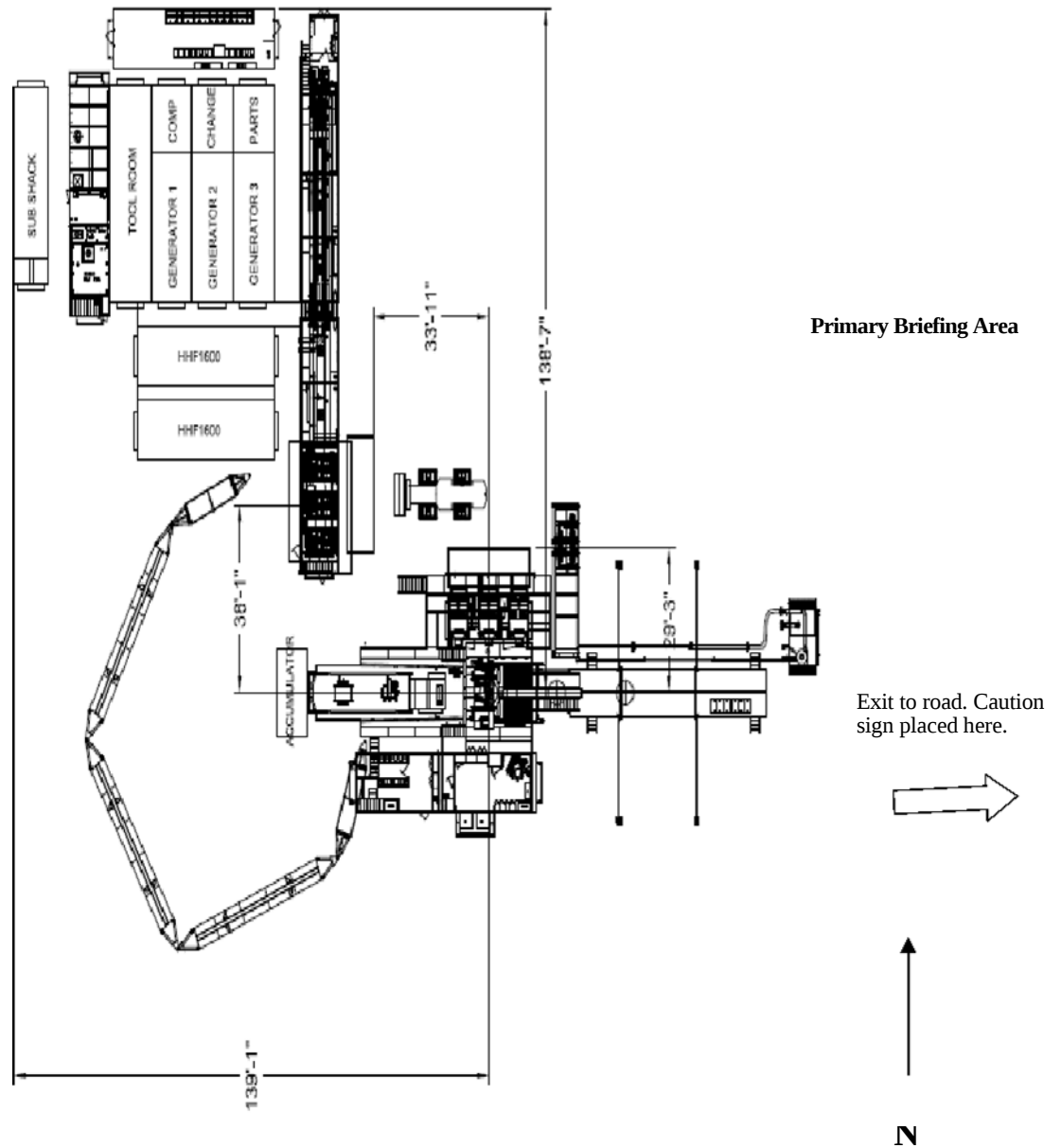
Permian Drilling Hydrogen Sulfide Drilling Operations Plan Ocho 20 Federal Com 70H Development

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



WIND: Prevailing winds are from the Southwest

Secondary Egress



RIG # 57_{1,150 HP Double Mast Drilling Rig}

SUBSTRUCTURE

One Piece Step Down

Floor Height: 18' 9" (on 4' pony sub moving system)

Clear Height (beneath rotary beams): 15' 5"

Rotary Capacity: 400,000 lbf

Max Pipe Setback: 400,000 lbf

Note: All floor heights above are based on the substructure sitting on 6" mats & 4' pony sub moving system

MAST

106' telescoping, Drill Line: 1-1/8"

Static Hook Load: 440,000 lbf

Racking Capacity: 18,000' of 4" DP, 12,500' of 5" DP

DRAWWORKS

TSM 850 425,000lbs w/ 10 Lines

Input Power: 1,150 hp AC traction motor

Main Brake: 1,150 hp AC traction motor (Dynamic)

Aux Parking Brake: Eaton brake & drum / band brake system

TOP DRIVE

Tesco EXI 600 AC 350 Ton: Max speed 220 rpm,

Continuous Drill Torque: 30,000 ft-lbs

Max Torque (Make / Break): 45,000 ft-lbs

600 hp AC induction motor & drive system with PLC

250 Ton 5 x 36" Becket Block Assembly

IRON ROUGHNECK

NOV ST-90C Conn Range: 4 1/4" to 8 1/2"

Spin Speed: 75 rpm nominal on 5" drill pipe

Spin Torque: 1,750 ft-lbs

Maximum Make-up torque: 60,000 ft-lbs

Maximum Break-out torque: 80,000 ft-lbs

ROTARY TABLE

National 27 1/2" 500 Ton with hydraulic drive to position tools only

27 1/2" Diameter opening

POWER SYSTEM

VFD, MCC, Eaton Drives, Current Power Systems Controls, three Caterpillar C32 gen

sets, 1220 BHP.

MUD PUMP #1

HHF1600 Triplex Rated Power: 1600 hp

Stroke: 12"

Input Power: 1500 hp AC traction motor

Pressure Rating: 5000 psi

MUD PUMP #2

HHF1600 Triplex Rated Power: 1600 hp

Stroke: 12"

Input Power: 1500 hp AC traction motor

Pressure Rating: 5000 psi

MUD TANKS

Two Tank system w/ 1200 bbls total capacity

Shakers: Three MI Swaco Mongoose 4 panel dual motion

Mud Gas Separator: MI Swaco 4' OD x 12' tall

Pill Tank: 54 bbls

MUD SYSTEM

5000 psi Max Pressure

5" Main plumbing and standpipe

SCALPING TANK

Main Tank: 186 bbls capacity

Trip Tank: 24 bbls capacity

Shakers: Three NOV Venom shakers dual motion

BOP (NACE)

11" x 5000 psi WP Spherical Annular

11" x 5000 psi WP Double Ram

11" x 5000 psi WP Single Ram (Optional)

MANIFOLD

3-1/8" 5,000 psi c/w two 3 1/8" manual chokes

ACCUMULATOR

CTI: 160 gal 6 station 3000 psi, c/w N2 Backup & electric triplex pump

CATWALK

Ja-co Power Catwalk, tubular max length 47' 6", max OD 13 5/8", max weight 10,000lbs

TUBULARS

Drill Pipe: Supplied as needed, per availability

Drill Collars & heavywate: Supplied as needed, per availability

MISC.

Water Tank: 409 bbls; Fuel Tank 189 bbls; Screw Compressor

Boiler: 125 hp with Full Winterization

MOVING SYSTEM:

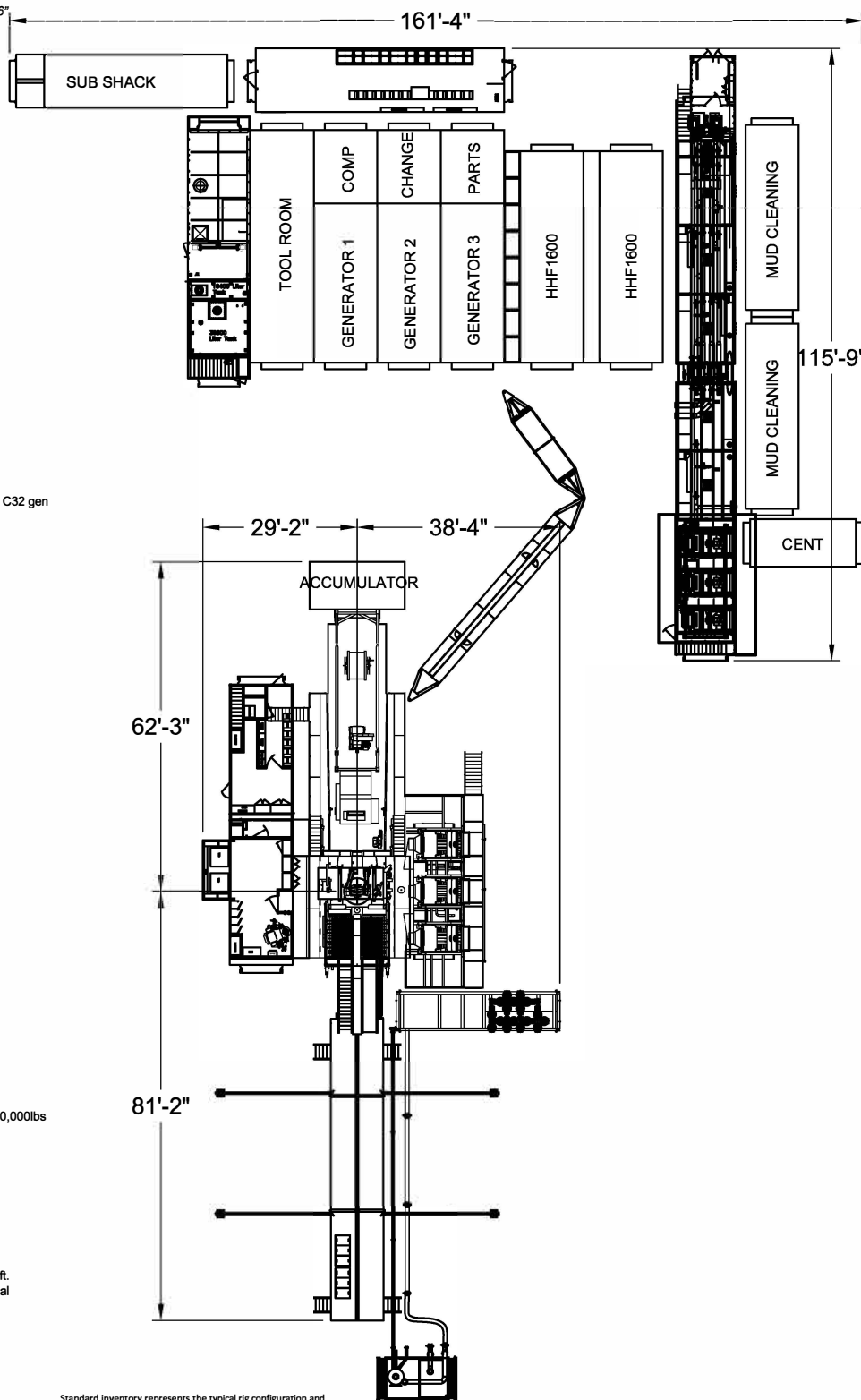
Walking beam hydraulic pony sub moving system for linear motion & side shift.

350' of Utility Suitcase style [50' lengths] connection for hydraulic and electrical supply.

TOOL/ STORAGE/ CAMP

Parts Storage Room and Tool House Room

Rig Manage Trailer: 14' x 44' skid mounted



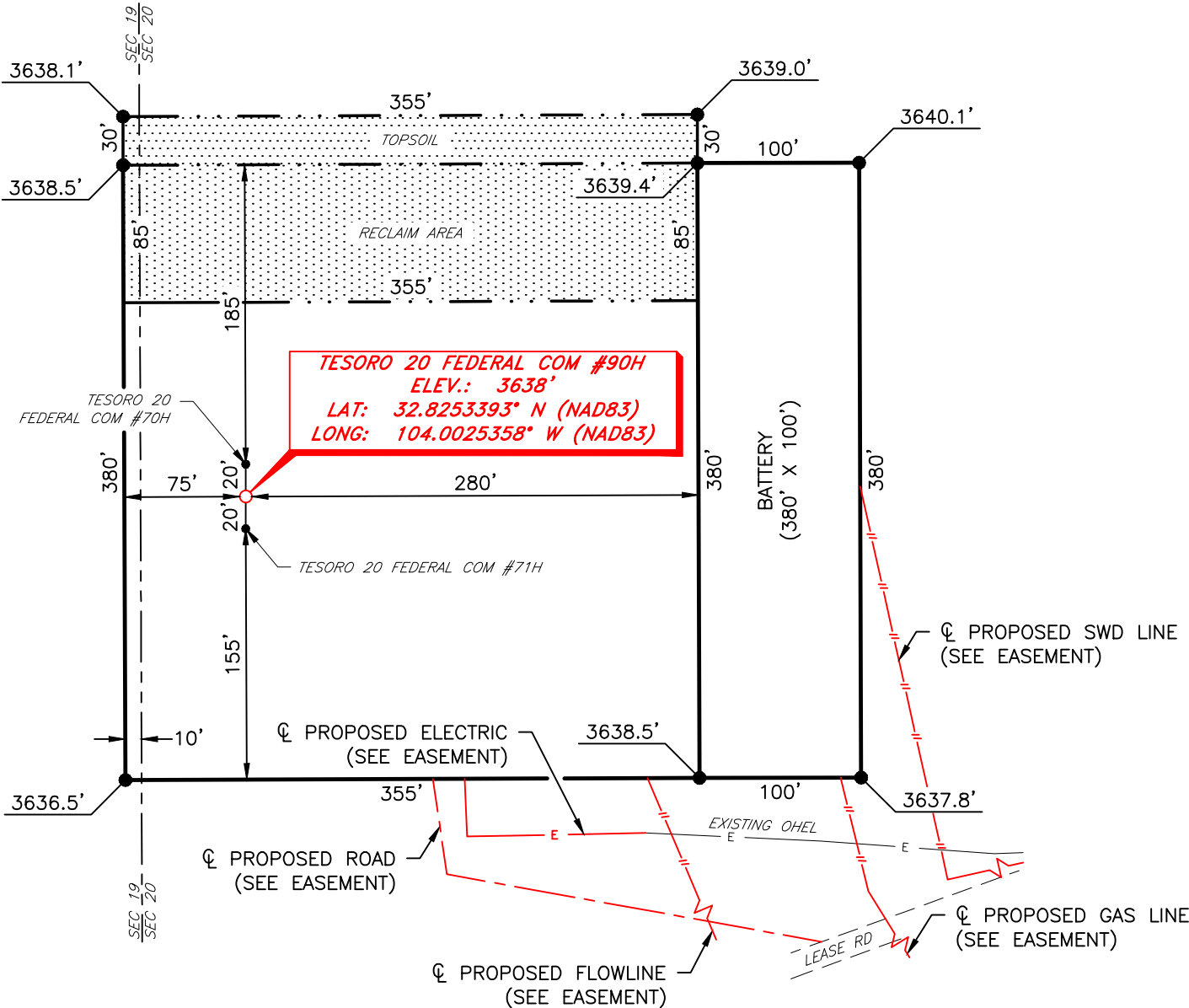
Standard inventory represents the typical rig configuration and inventory available, but specifications are subject to slight modifications from time to time due to customer requirements.

All ratings quoted herein are manufacturer specifications. AKITA's normal operating parameters are 90% of manufacturer mast ratings and 80% of mud pump manufacturer pressure rating. Operation of rig equipment beyond these parameters requires approval from AKITA field office management.

© AKITA DRILLING August, 2020

TRANSCEND RIG 4	Contractor Specification
Make	Schram
Model	TXD 130
Year of Manufacture	2006
Truck Mounted	YES
Rated Drilling Depth	130,000# hook load
Rated Depth with Tubing	
Derrick Height	69' 9"
Derrick Type	Telescoping Hydraulic
Derrick Capacity	130,000#
Elevators	N/A
Drawworks	760 HP Detroit
Wire Diameter	Hydraulic
Workfloor Max Height	8'
Tongs	Hydraulic Iron Roughneck
Slips	Manual Slips
Included Tubing Handling Tools	• 13 3/8" handling tools
Included Rod Handling Tools	85jts of 4.5" drill pipe
BOP Class Compatibility	
Weight Indicator	Hydraulic
Rig Safety Equipment	Eye wash station, fire extengushers, wind sock
Pad Size Requirements/Limitations	60' x 60'
Guy Line Spacing	N/A
Other Supplied Rig Equipment	Standard Rig Hand Tools: • (2) 36" pipe wrenches • (2) 24" pipe wrenches • (2) 18" pipe wrenches • (1) 24" crescent wrench • (2) 12" crescent wrenches • (1) 4 lb shop hammer • (1) 12 lb sledge hammer • (1) 4 foot pry bar • Vehicles for Contractor personnel • Air Impact Wrench with Sockets • Mud Scales (as needed)

SPUR ENERGY PARTNERS LLC.
TESORO 20 FEDERAL COM #90H
(710' FNL & 65' FWL)
SECTION 20, T17S, R30E
N. M. P. M., EDDY COUNTY, NEW MEXICO



CENTER POINT OF PAD
LAT: 32.8253809° N
LON: 104.0022021° W

CENTER POINT OF BATTERY
LAT: 32.8253807° N
LON: 104.0014617° W

DIRECTIONS TO LOCATION

From the intersection of CR #217 (Hagerman Cutoff Rd.) & U.S. Hwy 82;
Go West on U.S. Hwy 82 approx. 0.5 miles to a lease road on the right;
Turn right and go Northeast approx. 0.2 miles to a lease road on the left;
Turn left and go Northwest approx. 0.5 miles to a proposed road on the left;
Turn left and go Northwest approx. 380 feet to location on the left.

THIS IS NOT A BOUNDARY SURVEY, APPARENT PROPERTY CORNERS
AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY.

I, Thomas Aaron Fitzhugh, New Mexico Professional Surveyor
No. 26382, do hereby certify that this Unclassified Well Location Plat
and the actual survey on the ground upon which it is based were
performed by me or under my direct supervision; that I am
responsible for this survey; that this survey meets the Minimum
standards for Surveying in New Mexico; and that it is true and
correct to the best of my knowledge and belief.

Thomas Aaron Fitzhugh
Aaron Fitzhugh

N.M. P.S. 26382



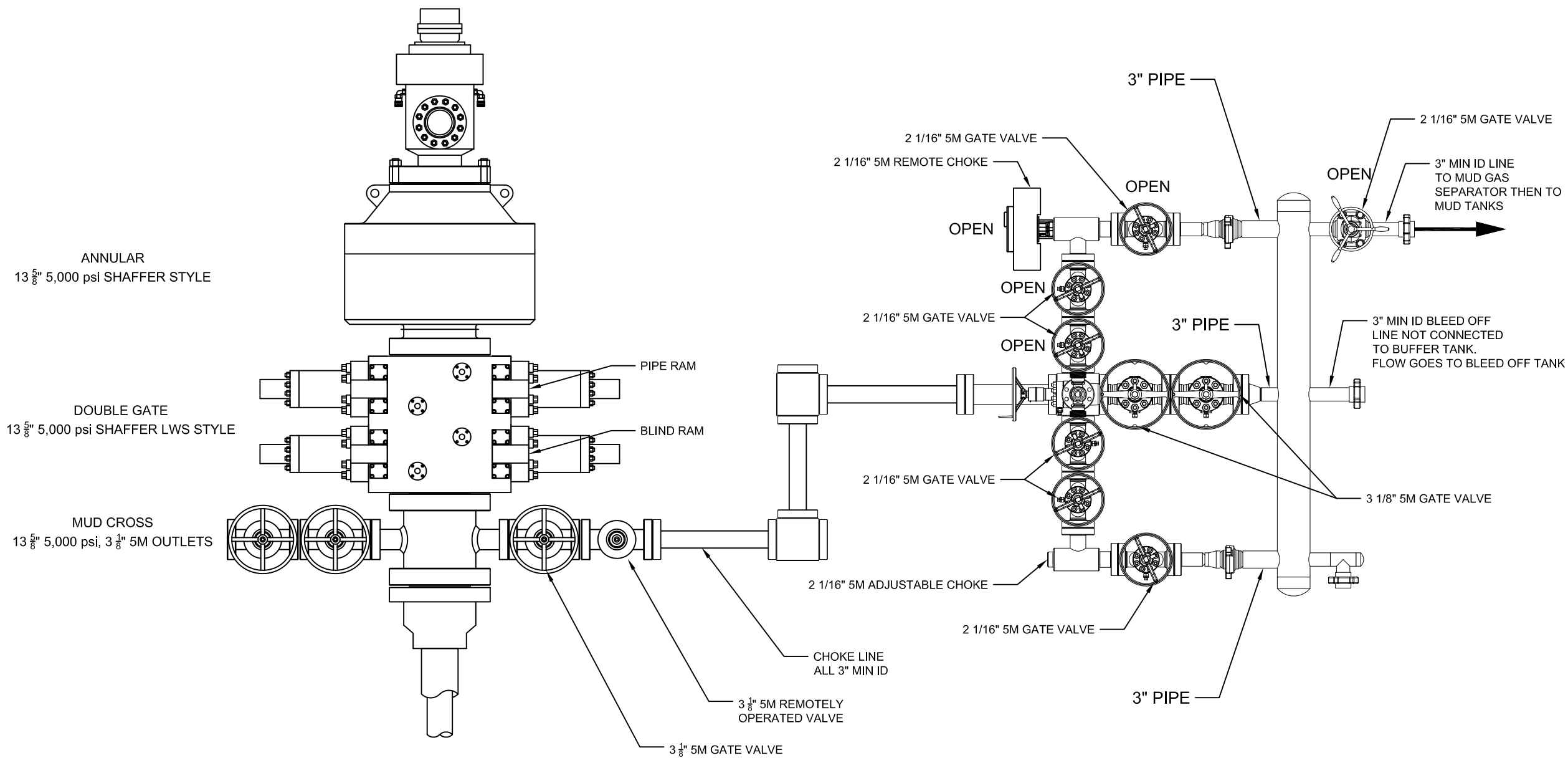
SCALE: 1" = 100'
0 50 100
BEARINGS ARE
NAD 83 GRID - NM EAST
DISTANCES ARE GROUND

1	NAME CHANGE	07/15/24
NO.	REVISION	DATE
JOB NO.: LS24050459R		
DWG. NO.: 24050459R-4		



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

SCALE: 1" = 100'
DATE: 05/28/2024
SURVEYED BY: RG/AM/EU
DRAWN BY: AR
APPROVED BY: TAF
SHEET: 1 OF 1



Notes
-
-
-

No.	Revision	Date
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AKITA
DRILLING LTD.
2302 8th Street, Nisku Alberta
T9E 7Z2 Tel: (780) 955-6700

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Date	5-6-2021	Scale	NTS
Des / Chk'd By	BG	File Name	R57 13 5M dou..
Project	R57		

RIG 57 BOP SCHEMATIC



POWERING PROGRESS™

MTR DATA BOOK

CL2013

CUSTOMER: GATES CANADA INC**DATE:** 12/19/2017**Purchase Order:** D235455 (PO 45750)**Sales Order #:** 509128**Product Description:** 5K 3 1/2 in. 17 FT. Fire Rated Choke & Kill Gates Hose Assembly c/w 3 1/8
5K Flange with Safety Clamps & Slings Attached**Hose S/N:** H-121917-14**PART NUMBER:** FR5K3.517.0CK31/85KFLG S/C**CONTENTS INCLUDED****GMCO FITTINGS**

17-309-1

INSERT STEM

15-095-1A

FERRULE

3 1/8 in. 5K FIXED FLANGE X 3 1/8 in. 5K FLOAT FLANGE

V4131

FIXED FLANGE

V5054

FLOAT FLANGE

WELDING SPECIFICATIONS

Certification and Procedure for welding

NDE RESULTS

1622371-03/1622371-01 Ultrasonic Test Results and Imaging

Safety Clamps

34145/34144

TEST CHART

Chart Recording of Hydrostatic Test

TEST CERTIFICATE

Document Product Details & Positive Results of Hydrostatic Testing

CERTIFICATE OF CONFORMANCE

A Declaration of the conformity with the type approval

IMAGES

Images of the product prior to shipping.

PACKING LIST

Details of Shipping Contents, Dimensions and Weights

**BLACK GOLD®**

GATES ENGINEERING & SERVICES NORTH AMERICA
7603 Prairie Oak Dr. Suite 190
Houston, TX. 77086

PHONE: +1 (281) 602-4100
FAX: +1 (281) 602-4147
EMAIL: gesna.quality@gates.com
WEB: www.gates.com/ollandgas

PRESSURE TEST CERTIFICATE

Customer:	GATES CANADA INC	Test Date:	12/19/2017
Customer Ref.:	D235455 (PO 45750)	Hose Serial No.:	H-121917-14
Invoice No.:	509128	Created By:	Cristian Rivera

Product Description: 5K 3 1/2 in. 17 FT. Fire Rated Choke & Kill c/w 3 1/8 5K Flange with Safety Clamps & Slings Attached

End Fitting 1:	3 1/8 in. 5K FIXED FLG	End Fitting 2:	3 1/8 in. 5K FLOAT FLG
Oracle Star No.:	68903550-9725917	Assembly Code:	15M5019042016H-121917-14
CUSTOMER P/N:	FR5K3.517.0CK31/85KFLG S/C	Test Pressure:	7,500 psi.
		Working Pressure:	5,000 psi.

Gates Engineering & Services North America certifies that:

The following hose assembly has successfully passed all pressure testing requirements set forth in Gates specifications: GTS-04-052 (for 5K assemblies) or GTS-04-053 (10K assemblies) or GTS-04-048 (15K assemblies), which include reference to Specification API 16C (2nd Edition); sections 7.5.4, 7.5.9, and 10.8.7. A test graph will accompany this test certificate to illustrate conformity to test requirements. This hose assembly was pressure tested using equipment and instrumentation that has been calibrated in accordance with the requirements set-forth in the GESNA management system.

Quality: QUALITY
 Date : 8/5/2021
 Signature :

Production:
 Date :
 Signature :

PRODUCTION
 8/5/2021

F-PRD-005B

Revision 6_05032021

**BLACK GOLD®**

GATES ENGINEERING & SERVICES NORTH AMERICA
7603 Prairie Oak Dr.
Houston, TX. 77086

PHONE: +1 (281) 602-4100
FAX: +1 (281) 602-4147
EMAIL: gesna.quality@gates.com
WEB: www.gates.com/ollandgas

CERTIFICATE OF CONFORMANCE

This is to certify that all parts and materials included in this shipment have manufactured and/or processed in accordance with various Gates and API assembly and test specifications. Records of required tests are on-file and subject to examination. Test reports and subsequent test graphs have been made available with this shipment. Additional supporting documentation related to materials, welding, weld inspections, and heat-treatment activities are available upon request.

CUSTOMER: GATES CANADA INC
CUSTOMER P.O.#: D235455 (PO 45750)
PART DESCRIPTION: FR5K3.517.0CK31/85KFLG S/C

PART DESCRIPTION: 5K 3 1/2 in. 17 FT. Fire Rated Choke & Kill c/w 3 1/8 5K Flange with Safety Clamps & Slings Attached

SALES ORDER #: 509128
QUANTITY: 1
SERIAL #: H-121917-14

SIGNATURE: _____

A handwritten signature in black ink, appearing to read "O. Rivera", written over a horizontal line.

TITLE: _____

QUALITY ASSURANCE

DATE: _____

8/5/2021

Gates E&S

North America

7603 Prairie Oak dr.

Houston, TX

Hydrostatic Test

Customer= **GATES CANADA**

Date of test= **12/19/17**

Serial # = **H-121917-13,-14**

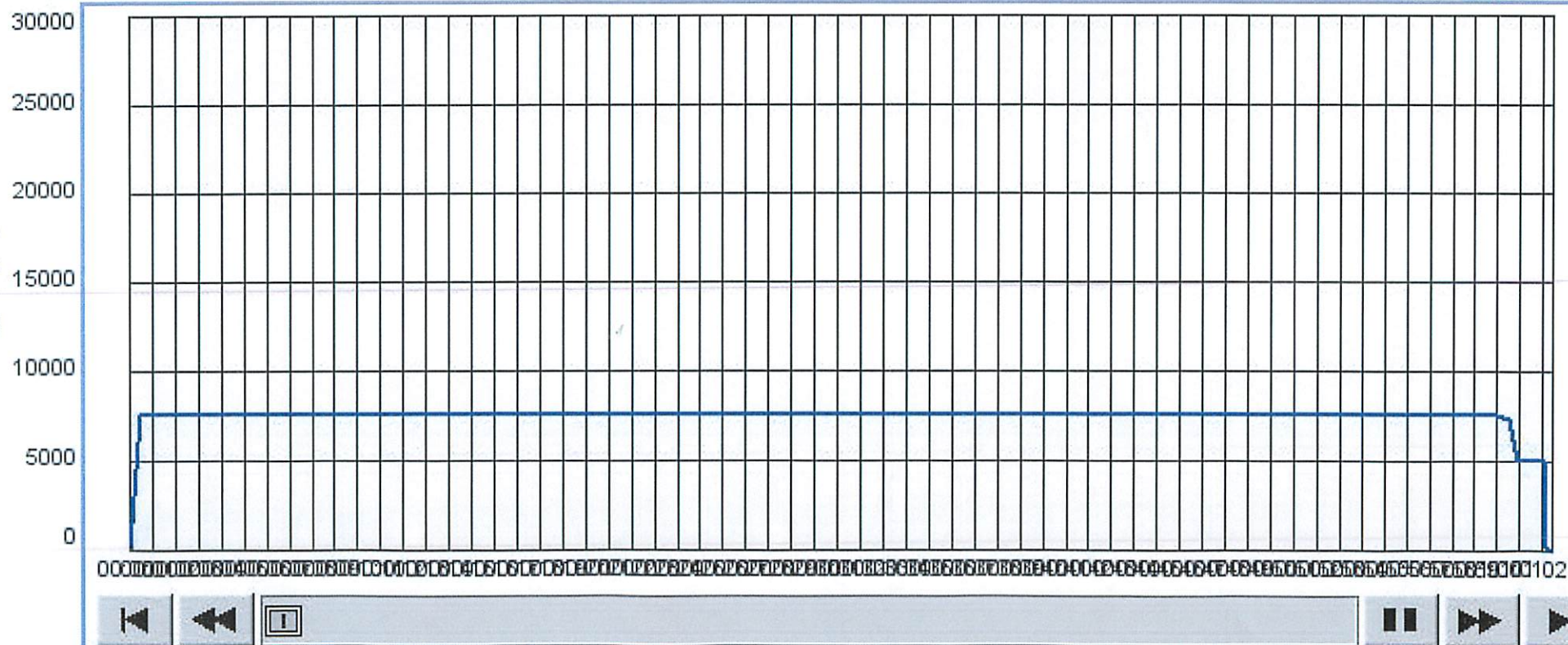
Description = **3.5 5K 3 1/8 FLG 5K**

Technician= **CHRIS OLIVO**

12/19/2017 16:53:26

17:55:52

P
S
I
G





Edwards Fabrication, L.L.C.

1385 Hwy. 35 Bypass S. O: (361) 790-7910
 P.O. Box 2350 F: (361) 790-7927
 Rockport, TX 78381

tedwards@edwardsfabrication.com
 www.edwardsfabrication.com

CERTIFICATE OF TEST

Client:
 Gates E & S North America
 134 44th Street
 Corpus Christi, TX 78405

Purchase Order: 1592198/0

Certificate Number			Date of Examination	
34145			04/27/17	
ID#	Part Number	Description	SWL*	Proofload
34145	E3.5S	3.5" E Safety Clamp	6016 lbs.	12031 lbs.

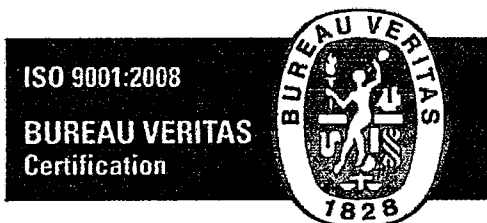
The Safety Clamp unit identified on this certificate has been load tested completely assembled; including the clamp body, (2) 3/4" shackles, 5/8" x 48" wire rope sling and anchor tab. Thus, all components are tested at the "Proof" load. Do not disassemble. Do not interchange any part or parts of this tested unit with parts of other Safety Clamp units. DO NOT WELD, CUT, ADD-TO, TAKE AWAY ANY COMPONENTS OR MAKE ANY MODIFICATION TO THIS CLAMP UNIT. Doing so voids this test certificate.

Cutting/Removing either one or both stainless steel Tamper-proof hardware cables renders this Test Certificate VOID.

* Safe Work Load

THIS PRODUCT IS MANUFACTURED IN THE U.S.A.

We hereby verify that the above information is correct
 as contained in the records of Edwards Fabrication L.L.C.



Edwards Fabrication L.L.C. is certified as
 having a Quality Management System.

Thomas F. Edwards
 President
 Edwards Fabrication L.L.C.



1385 Hwy. 35 Bypass S. O: (361) 790-7910
 P.O. Box 2350 F: (361) 790-7927
 Rockport, TX 78381

tedwards@edwardsfabrication.com
 www.edwardsfabrication.com

CERTIFICATE OF TEST

Client:
 Gates E & S North America
 134 44th Street
 Corpus Christi, TX 78405

Purchase Order: 1592198/0

Certificate Number				Date of Examination	
34144				04/27/17	
ID#	Part Number	Description	SWL*	Proofload	
34144	E3.5S	3.5" E Safety Clamp	6014 lbs.	12027 lbs.	

The Safety Clamp unit identified on this certificate has been load tested completely assembled; including the clamp body, (2) 3/4" shackles, 5/8" x 48" wire rope sling and anchor tab. Thus, all components are tested at the "Proof" load. Do not disassemble. Do not interchange any part or parts of this tested unit with parts of other Safety Clamp units. DO NOT WELD, CUT, ADD-TO, TAKE AWAY ANY COMPONENTS OR MAKE ANY MODIFICATION TO THIS CLAMP UNIT. Doing so voids this test certificate.

Cutting/Removing either one or both stainless steel Tamper-proof hardware cables renders this Test Certificate VOID.

* Safe Work Load

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Thomas F. Edwards
 President
 Edwards Fabrication L.L.C.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 445778

CONDITIONS

Operator: Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	OGRID: 328947
	Action Number: 445778
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
schapman01	Cement is required to circulate on both surface and intermediate1 strings of casing.	3/26/2025
schapman01	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	3/26/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	4/11/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	4/11/2025
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	4/11/2025
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	4/11/2025
ward.rikala	Administrative order required for non-standard location prior to production.	4/11/2025
ward.rikala	Administrative order required for non-standard spacing unit prior to production.	4/11/2025