Form 3160-5 (August 1999)

# UNITED STATES

SUNDRY NOTICES AND REPORTS ON WELLS

DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT** 

MAR 2 4 2008

FORM APPROVED OMB NO. 1004-0135 Expires: November 30, 2000

5. Lease Serial No. OOD ABTEOL NM-12828

Do not use this form for proposals to drill or to re-enter an	ucu-ar iesif	6. If Indian,	Allottee
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Olivelt   Gas Well   Other	Do not use this form for abandoned well. Use Fort	ik iediki <sub>6.</sub>	. If Indian, Allotte	e or Tribe Name				
Olivelt   Gas Well   Other	SUBMIT IN TRIPLICATE -	7.	. If Unit or CA/A	greement, Name and/or No.				
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  TYPE OF ACTION    Notice of Intent	2. Name of Operator OXY USA WTP Limited Partnership  3a. Address P.O. Box 50250, Midland, TX 79710-  4. Location of Well (Footage, Sec., T., R., M., or Survey to SL - 240 FSL 1840 FEL SWSE(0) Sec.	Sh 3 9. 0de) 30 Mc	Shelby 12 Federal #7  9. API Well No. 30-015-34985  10. Field and Pool, or Exploratory Area McKittrick Hills, Up. Penn					
TYPE OF SUBMISSION  TYPE OF ACTION    Notice of Intent   Acidize   Deepen   Production (SurvResume)   Water Shur-Off   Alter Casing   Fricture Treat   Reclamation   Well Integrity   Mater Casing Repair   New Construction   Recomplete   XI Other Completion   Change Plans   Plug and Abandon   Temporarity Abandon   Shut-In   Convert to Injection   Plug Back   Water Disposal   Wate	12. CHECK APPROPRIATE	BOX(ES) TO INDIC	ATE NATURE OF NO	***************************************				
Alter Casing   Fracture Treat   Reclamation   Well Integrity					<u> </u>			
Name (Printed/Typed) David Stewart  Sr. Regulatory Analyst  Date 3(20/08)  THIS SPACE FOR FEDERAL OR STATE OFFICE USE	Alter Casing Fracture Treat Reclamation Well Integrity  Casing Repair New Construction Recomplete  Change Plans Plug and Abandon Temporarily Abandon Shut-In  Convert to Injection Plug Back Water Disposal  Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration of the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within following completion of the involved operations. If the operation results in a multiple completion or recompleted. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operation of the involved operation of the involved operation.							
Approved by  Title  Date  Conditions of approval, if any, are attached Approval of this notice does not warrant or Office	David Stewart  THIS  Approved by		Sr. Reguind Sr. Reguind Sr. Reguind State State Office State Office State Office State Sta	(08				

#### **SHELBY 12 FEDERAL #7**

11/28/2006 CMIC: henrich

miru key reverse unit, set in matting boards & pipe racks, spot pulling unit, wait on tie down anchors to be set, got two anchors set on south side of loc, could not get the two on the north side set, will try again in am.

11/29/2006 CMIC: henrich

hold safety meeting.unload,rack & tally 275 jts. 2 7/8" L-80 tbg.,stand by for rest of anchors to be set,rig unit up,nu 5k hyd. bop & test(OK)rih w/6 1/8" bit on 165 jts. 2 7/8" tbg. to 5250',sisd!

11/30/2006 CMIC: henrich

hold safety meeting,rih w/24 jts.,tag @ 5991',ru power swivel.test csg. to 1500#(OK)break circ.,drill cmt. from 5991' to 5997',drill dv tool from 5997' to 6001',test csg. to 1500#(OK)rih & tag @ 8579',ru swivel,drill cmt. from 8579' to 8606' & tagged fc,chc,test csg. to 1500#(OK)rd swivel,pooh w/105 jts, tbg,.sisd!

12/01/2006 CMIC: henrich

held crew in for roads to clear, hold safety meeting, finish pooh w/tbg. & bit, sisd!

12/02/2006 CMIC: henrich

hold safety meeting,miru schlumberger wl,rih w/cbl logging tools,tag pbtd @ 8596',run cmt. bond log from pbtd to 200',good cmt. from pbtd to 846',poor cmt. from 846' to 200',rd wl,rih w/6 1/8" bit & 7" csg. scraper on 2 7/8" tbg. to 6100',work scraper thru dv tool several times,did not see any drag,pooh,sisd for weekend!

12/05/2006 CMIC: henrich

hold safety meeting, load hole w/14 bfw, miru schlumberger wl, rih w/4" 120 degree perforating guns & perforate Cisco formation from 7953'-8102', 8141'-8202'(424 holes) in 8 runs(first run was a misfire). 40 eh, 24" pen., fl after perf. 5900', rd wl, rih w/baker 7" retriev-a-matic pkr., 2 7/8" sn on 100 jts. 2 7/8" tbg., sisd!

12/06/2006 CMIC: henrich

hold safety meeting,0# sip,finish rih w/pkr.,set pkr. @ 7886' on 248 jts. 2 3/8" tbg.,load csg. w/190 bfw & test to 1500#(OK) ru swab,rec. 0 bo,40 bw,0 gas in 6 hrs.,ifl 6300' fs,ffl 6300' fs,sisd.

12/07/2006 CMIC: henrich

hold safety meeting, sitp 12#, ru swab, rec. 70 bw in 10 hrs., if1 6300' fs, ff1 6300' fs, no oil, no gas, sisd.

12/08/2006 CMIC: henrich

hold safety meeting,miru halliburton,10# sitp,press. csg. to 1000#,start acid job & halliburton pump broke down,wait on another pump for 3 hrs.,ru new pump,pump 20,174 bbls. of 15% ferchek acid & 12000# of rock salt in 14 stages,mtp 4752#,atp 372#,mir 10.2,air 6.8 bpm,isip vac.,saw good block action on last two blocks,si,rd halliburton,release pkr. & pooh w/tbg. & pkr.,sisd.

12/09/2006 CMIC: henrich

hold safety meeting,220# sip,bleed down,rih w/2 7/8" notched collar & 252 jts. 2 7/8" tbg.,tag @ 8005'(601' of fill)ru power swivel,clean out salt to 8606',pooh w/12 jts. to 8228',ru swab,rec. 25 bw in 2.5 hrs.,ifl & ffl 6500' fs,sisd for weekend.

12/12/2006 CMIC: henrich

hold safety meeting,0# sitp,600# sicp,ru swab,rec. 72 bw in 10 hrs.,ifl & ffl 6800' fs,no oil or gas,fsicp 600#,sisd.

12/13/2006 CMIC: henrich

hold safetymeeting,0# sitp,600# sicp,ru swab,rec. 38 bw in 4 hrs.,ifl & ffl 6800' fs,no oil,no gas,rd swab,bleed csg. down,kill well,rih w/12 jts. & tag @ 8606'(no fill)pooh w/tbg.,sn & notched collar,nd bop,nu sea board esp wh,nu bop & torus,sisd.(pumped 340 bw to keep well dead)

12/14/2006 CMIC: henrich

hold safety meeting,300# sip,kill well,assemble shroud & esp pump,rih on 2 7/8" tbg. banding cable & ss cap tbg. to tbg. w/8 bands per stand,splice on pig tail,land tbg.,nd bop,nu wh,sisd.

1-5.5" x 77' shroud		
1-smartgaurd	-	3.00
2-456-UT-HTI/ESP 120 hp 1296 volt motors	-	61.55
2-TR-98L-UHSS/ESP seals	~	10.85
1-BOI 438-400-PSS-ESP	-	1.60
1-intake adapter TR4-TR5/ESP		
2-TE 4200 71-HSS FL-CT-BOH/ESP pumps	-	38.50
1-2 7/8" sn	-	1.10
258-jts. 2 7/8" L-80 tbg.	-	8184.92
TOTAL	•	8301.52
KB	-	16.00
BOTTOM OF SHROUD	_	8317.52

12/15/2006 CMIC, henrich

hold safety meeting,rig unit down.clean loc.,move off loc.

DATE	OIL	WTR	GAS	TBG	CSG
12/29/2006	8	2510		358	202
12/30/2006	10	4874		322	191
12/31/2006	9	4079		307	198
01/01/2007	51	4474	8	301	197
01/02/2007	16	4415	2	281	183
01/03/2007	30	2235	2		183
01/04/2007	49	4281	4	272	182
01/05/2007	19	3955	22	253	170
01/06/2007		4192	18	243	175
01/07/2007	17	4196	5	246	176
01/08/2007	20	3965	7	247	176
01/09/2007	80	4285	14	247	176
01/10/2007	82	7462	7	246	175
01/11/2007	45	4659	26	234	161
01/12/2007	58	4053	36	215	145
01/13/2007	65	4111	40	215	140
01/14/2007	52	3515	36	2.0	121
01/15/2007	18	4514	34	220	140
01/16/2007	18	4514	34	220	140
01/17/2007	, 0		01	220	107
01/18/2007					107
01/19/2007	44	4050	71	210	136
01/20/2007	51	4298	37	227	143
01/21/2007	75	4505	40	219	137
01/22/2007	55	4501	36	127	193
01/23/2007		2248	19	134	196
01/24/2007			6		132
01/25/2007	53	2924	21	218	131
01/26/2007	48	4493	31	220	134
01/27/2007	24	3163	20	215	132
01/28/2007	13	4325	30	240	163
01/29/2007	48	4645	34	245	162
01/30/2007	42	4191	29	240	162
01/31/2007	44	4047	26	240	162
02/01/2007	43	3835	25	250	169
02/02/2007	47	4281	24	238	164
02/03/2007	30	4191	22	240	170
02/04/2007	21	211	7		175
02/05/2007	13	3278	20	250	170
02/06/2007	20	4324	29	240	169
02/07/2007	14	4168	33	250	172
02/08/2007	14	4532	32	251	173
02/09/2007	12	4270	33	250	172
02/10/2007	36	4048	34	251	173
02/11/2007	41	4569	35	250	173
02/12/2007	26	4284	29	246	170
02/13/2007	48	4325	30	243	172
02/14/2007	40	4270	21	250	175
02/15/2007	31	4059	48	232	138
02/16/2007	7	829	24		

# 02/16/2007 CMIC: henrich

hold safety meeting, set in matting boards & pipe racks, miru aries pulling unit #38.nd wh, nu 5 k hyd. bop & torus, sisd.

#### 02/17/2007 CMIC: henrich

hold safety meeting,sitp 0#,sicp 180#,kill well & con't pumping @ 2.5 bpm to keep well dead.miru spoolers.pooh laying 2 7/8" tbg. down,had 159 jts. out & cable quit coming w/tbg.,rih w/3 jts. & start banding out of hole,did not have any cap. string left attached to tbg. after jt. #160(3200' of ct in hole)got a total of 177 jts. tbg. out of hole & tbg. quit coming,try to work free w/no success.band cable to tbg. 6' below tbg. collar w/10 bands.cut cable @ surface,lower tbg. down to slips & shut well in w/bop,sdon.(no hes events)(top of pump @ 2572'.bottom of shroud @ 2687')

#### 02/18/2007 CMIC henrich

hold safety meeting,sip 50#,bleed down.p/u on tbg. to banded cable & cable had slipped out of bands overnight,try to work pump back to bottom,work down hole 4 jts. putting bottom of shroud @ 2818',could not get tbg. to go any further down,(still have 15' of travel up & down)sisd.(no hes events)

#### 02/20/2007 CMIC: henrich

hold safety meeting.20# sip,miru rotary wl,rih w/free point tools,100% free to top of pump,stuck below top of pump,pooh,rih w/ 2 7/8" chem. cutter & cut tbg. @ 2675'(15' above top of pmp.)pmp. did not fall,pooh,rd wl,work tbg. free & pooh w/84 jts. 2 7/8" tbg. & 15' piece,tbg. had drag for first 74 jts.,rih w/single prong grab.start fishing @ 45',clean out wellbore to 250' in 8 hrs.,rec. approx. 345' ct,365' ec,sisd.(no hes events)

#### 02/21/2007 CMIC: henrich

hold safety meeting,0# sip,rih w/single prong grab & bumper sub on 2 7/8" tbg..tag @ 527',work grab & pooh,rec. 10 ec,10' ct,rerun,tag @ 527',work pooh,rec. 5' of each,rerun,tag @ 532',work & pooh,rec. 5' of each,rerun,tag @ 532',work & pooh,rec. 5' of each,rerun,tag @ 532',work & pooh,rec. 5' of each,rerun,tag @ 533',work & pooh,rec. no ec,5' of ct,rerun,tag@ 544',work & pooh,no rec.,change to different grab & rih,tag @ 559',work & pooh,rec. 5' of ec,no ct,add 1-4 3/4" drill collar on top of bumper sub & rih tag @ 560',work & pooh,no rec.,rih w/5.5" screw grab,tag @ 560',ru power swivel,work screw grab,rd swivel,pooh,rec. 2' of each,sisd.(rec. a total of 32' of ec & ct for day)(running total 397 ec,377' ct)(one hes event,while tripping tbg. into well in high winds floorhand got iron sulfite powder off of tbg. into his eye,he was wearing his safety glasses,washed eye w/eye wash for several minutes & went back to work,eye was red & irritated for a couple of hrs. & then cleared up,floorhand said he was ok)

#### 02/22/2007 CMIC: henrich

hold safety meeting,0# sip,rih w/center prong spear,bumper sub,1- 4 3/4" drill collar on 2 7/8" tbg.,tag @ 582',work spear & pooh,rec. 60' of ct,rerun,tag @ 587' work tool,pooh,rec. 230' ct,rerun,tag @ 687' work & pooh,rec. 400' of ec,rerun,tag @ 862',work & pooh,rec. 150' ct,rerun,tag @ 862',work & pooh,rec. 10' ec,rerun,tag @ 945',work & pooh rec. 690' of ec,sisd.(1497' of ec,727' of ct total)(no hes events)

#### 02/23/2007 CMIC: henrich

hold safety meeting,0# sip,rih w/center prong grab,tag @ 1100',work & pooh,rec.120' ct,rerun,tag @ 1140',work & pooh,rec. 75' ct,rerun,tag @ 1200',work & pooh,rec. 60' ct,rerun,tag @ 1400',work & pooh,rec. 100' ct,rerun,tag @ 1480',work & pooh,rec. 60' ct,rerun,tag @ 1500',work & pooh,rec. 60' ct,rerun,tag @ 1545',work & pooh,no rec.,rerun,tag @ 1400'(lost 145' of hole)work & pooh,rec. 30' ec,60' ct,sisd.(total fo day 30 ec,535' ct)(running total rec. 1527' ec,1262' ct)(no hes events)

# 02/24/2007 CMIC: henrich

hold safety meeting,0#sip,rih w/center prong grab,bumper sub,1-4 3/4" d.c. on 2 7/8" tbg.,tag @ 1766',work down to 1860',pooh,rec. 60' ct,rerun,tag @ 1890' work & poh,rec. 30' ct,870' of ec & motor flat,sisd due to high winds.(approx. 1800' of ct left to rec.)(no hes events)

#### 02/27/2007 CMIC: henrich

hold safety meeting,50# sip,bleed down,rih w/center prong grab,bumper sub,1-4 3/4" d.c. on 2 7/8" tbg.,tag @ 1430',work grab & pooh,rec. 60' ct,rerun,tag @ 2180',work & pooh,rec. 60' ct,rerun,tag @ 656' work & pooh,rec. 120' ct,rerun,tag @ 2495',work & pooh,rec. 60' ct & about 40 bands,rerun,tag @ 2497',work & pooh,rec. 120' ct,sisd.(total for day 420' ct)(approx. 1380' left in hole)(no hes events)

## 02/28/2007 CMIC. henrich

hold safety meeting, 10# sip, bleed down.rih w/center prong grab, 4 3/4" bumper sub, 1-4 3/4" d.c. on 2-7/8" tbg.,tag @ 2550',work grab & pooh,rec. 60' ct,rerun,tag @ 2550',work & pooh.rec. 120' ct, rerun, tag @ 2715',work & pooh.rec. 30' ct & end of ct w/drain holes drilled in it,rih w/5 3/4" overshot w/2 7/8" grapel, 4 3/4" bumper sub, 4 3/4" hyd. jars, 2-4 3/4" d.c.'s on 83 jts. 2 7/8" tbg.,tag @ 2675',latch onto fish & pooh having to work thru every csg. collar,left fish & bha swinging 2 jts. from surface, sisd. (will have pump tech. on loc. this am to lay down pump assy.)(no hes events)

#### 03/01/2007 CMIC henrich

hold safety meeting, 10# sip,bleed down,work 2 jts. tbg..d.c.'s.jars.bumper sub & over shot out of hole.lay down cut off jt.,worked 1 1/2 pumps above bop & lost all movement, lay down top pump, have 10' of #2 pump sticking above bop, try to work free w/no success.shut well in w/torus & tiw valve.sdon.(appears to be stuck approx. 12' from surface w/debris packed around shroud)(will have driving tools on loc. this am to try & knock equip. free)(no hes events)

#### 03/02/2007 CMIC: henrich

hold safety meeting,0# sip.make up 6" bumper sub onto 6" drill collar,p/u & screw into top of esp pump.drive pump down hole 12',work back up hole 12',con't. working fish up & down hole trying to free up w/no success.nd bop & tarus,had 3' piece of motor flat stuck be tween pump & wh,work motor flat loose,con't working fish up & down & finally got pump out of hole,pump had parted where it was connected to intake leaving motors & shroud in hole,lay down driving tools & fish,nu bop,sisd

#### 03/03/2007 CMIC: henrich

hold safety meeting, sicp 20#, bleed down, rih w/6 1/8" box tap, 4 3/4" bumper sub, 4 3/4" hyd. jars, 2-4 3/4" drill collars on 2 7/8" tbg..tag up solid @ 6022'appeared to be latched onto fish, try to work fish loose for 2 1/2 hrs. w/no success, jarred off of fish 6 times & was able to latch right back on, last we jarred off it took 6 hits @ 85,000# to jar off, pooh, box tap had not had anything inside of it, was scared on outside & eggshaped, sisd for weekend. (no hes events)

#### 03/06/2007 CMIC: henrich

hold safety meeting. 120# sip, bleeddown, rih w/6" lead impression block on 2 7/8" tbg., did not see spot @ 6022' where we tagged w/box tap, tag solid @ 6190', set 15 pts. on block, pooh, block showed 1 5/8" od coupling looking up, rih w/6" od box tap, 4 3/4" bumper sub, 4 3/4" hyd. jars, 2- 4 3/4" d.c.'s on 2 7/8" tbg. (did not see spot @ 6022') tag @ 6190', work box tap & could not get a bite, con't to work tap & finally got a small bite but would pull off @ 15,000# over weight, knock fish down hole 5' to 6195', fish would not go any farther, could not get a good enough bite to pull more than 15,000# over, pooh w/tbg. & bha, rec. 1.5' long threaded top connection of shroud w/pump intake & coupling inside of box tap(pin end of shroud piece was rolled in & heavely damaged indicating that top of fish is in same shape, will have to dress inside of shroud to be able to fish.) sisd. (no hes events)

#### 03/07/2007 CMIC: henrich

hold safety meeting, 20# sip, bleed down, rih w/4 7/8" tapered mill, 2-4 3/4" d.c.'s & 193 jts. 2 7/8" tbg., tag @ 6195', ru power swivel, mill from 6195' to 6197' in 2.5 hrs., quit making hole, could not get mill to past 6197', rd swivel, pooh, mill 100% worn out. rih w/6" lead impression block on 2 7/8" tbg., tag @ 6195', set 15 pts. on block, pooh, block showed imprint of 5.5" od shroud, sisd.

## 03/08/2007 CMIC: henrich

hold safety meeting,0# sip,rih w/5.5" csg. spear,4 3/4" bumper sub,4 3/4" hyd. jars,2-4 3/4" d.c.'s,4 3/4" accelerator on 2 7/8" tbg.,tag @ 6200' latch into fish,set jars off 3 times & believe fish jared into, pooh, fish hung up @ 6022',work thru w/bumper sub,pooh,rec. 5' piece of shroud,rerun spear,tag @ 6205',try to latch fish w/no success,pooh,had slight nicks on bottom tip of nose cone,grapel had not touched anything,sisd.(no hes events)

#### 03/09/2007 CMIC: henrich

hold safety meeting,rih w/4 7/8" od box tap,4 3/4" bumper sub,hyd. jars,2 -4 3/4" d.c.'s on 2 7/8" tbg.,tag fish @ 6205',work tap & could not get a bite,ru power swivel,rotate while working tap,got a small bite a few times but would loose bite @ 10 pts. over,rd swivel,pooh,bottom of tap was chewed up badly,could tell that there had been a possible sliver of the shroud inside of tap about 6" up, decide to run shoe & wash over esp seal,shoe that was on loc. had to big of an ID,took shoe to be built up,sisd.(no hes events)

#### 03/10/2007 CMIC: henrich

hold safety meeting,rih w/6 1/8" sod,4 7/8" mid kutrite shoe,4 3/4" hyd. jars,2-4 3/4" d.c.'s on 193 jts. 2 7/8" tbg.,tag @ 6204,ru power swivel,mill from 6204' to 6208'(4' in 5 hrs.),rd swivel,pooh,shoe showed signs of having fish inside shoe 3',will run overshot on mon.,sisd for weekend.(no hes events)

#### 03/13/2007 CMIC: henrich

hold safety meeting, 100# sip, bleed down.rih w/5 3/4" overshot w/4" grapel, 4 3/4" bumper sub, 4 3/4" hyd. jars, 2-4 3/4" d.c.'s on 2 7/8" tbg., tag top of fish @ 6205', work over shot, got bite & pulled up to 30 pts. over weight & lost bite try to get another bite w/no success, pooh w/tbg. & bha, had slight marks in guide, control was bent & fouled indicating that 4" flange on top of seal is bent & would not let fish get to grapel, sisd. (no hes events) (will have shoe built up to 4" ID & will dress top of fish this am)

# 03/14/2007 CMIC: henrich

hold safety meeting.sip 10#.rih w/6 1/8" sod x 4 1/16" mid kut-rite shoe,4 3/4" hyd. jars, 2-4 3/4" d.c.'s on 2 7/8" tbg.,tag tight spot @ 5998',work thru,tag @ 6205',ru power swivel,mill over fish from 6205' to 6209',rd swivel,pooh,rec. 2 pieces of shroud 1.6" long &6" piece of shaft out of seal & 6" piece of motor seal,rih w/5 3/4" overshot w/4" grapel,4 3/4" bumper sub.4 3/4" hyd. jars,2-4-3/4" d.c.'s on 2 7/8" tbg.,tag @ 6206',ru power swivel,work overshot from 6206' to 6209',did not get a bite,rd swivel & pooh,did not have anything in ft & did not appear to have had anything inside of ft,will run lead impression block this am,sisd.(no hes events)

#### 03/15/2007 CMIC: henrich

hold safety meeting,rih w/6" lead impression block on 2 7/8" tbg.,tag @ 6207',set 10 pts. on block,pooh,block showed impression of pump shaft looking up.rih w/5 3/4" overshot w/3 7/8" grapel,4 3/4" bumper sub,4 3/4" hyd. jars,2-4 3/4" d.c.'s on 2 7/8" tbg.,work ft over top of fish @ 6207',guide of overshot stopped @ 6209',work ft to get bite w/no success,pooh.cut lip guide showed where it had sat down on shroud @ 6209',grapel had paint gone from inside for 3/4 length of grapel,other than that there where no mark on tool,sisd.

#### 03/16/2007 CMIC: henrich

hold safety meeting.rih w/5 7/8" short catch overshot w/3 7/8" graple,bumper sub,hyd. jars,d.c.'s on 2 7/8" tbg..tag up @ 6209'(top of fish @ 6207')did not feel tool go over fish,pick up & had a bite,ease up on fish 3 times & tool pulled off @ 15 pts. over, try to get another bite w/no success,pooh,no rec..change graple to 3 3/4" & rih w/same bha,tag up @ 6209',did not feel tool go over fish,p/u & had a bite,set jars off 3 times @ 15 pts. over & tool pulled off.could not get another bite,pooh.grapel showed that fish is egg shaped & was only biting on 2 sides,will run 3 5/8" grapel this am,sisd.(no hes events)

#### 03/17/2007 CMIC: henrich

hold safety meeting, well on vac., rih w/5 7/8" short catch overshot w/3 5/8" graple, bumper sub.hyd. jars,d.c.'s & accelerator on 2 7/8" tbg., latch onto fish @ 6207', set jars off 1 time & pulled off fish, latch back on to fish, jar on fish for 1 hr. & appeared to pull off, try to latch back on w/no success, pooh, rec. 3 pieces of motor protector housing 1-11", 1-16", 1-19" long, sisd for weekend. (will run short catch on mon. am) (no hes events)

## 03/20/2007 CMIC: henrich

hold safety meeting,well on vac.,rih w/5 7/8" od short catch overshot w/3 7/8" grapel,bumper sub.hyd. jars.d.c.'s,accel. on 2 7/8" tbg.,tag @ 6209',latch onto fish,pull 5 over & pulled off,try to latch back on w/no success,pooh,had some blach parafin like substance in overshot,discuss what to run w/eng.,rih w/6 1/8" sod x 4 7/8" mid kut-rite shoe,hyd. jars,d.c.'s on 2 7/8" tbg.,tag @ 6209',ru power swivel,mill 6" in 1.5 hrs.,hole load w/120 bfw,nu stripper,chc,p/u 30',sisd.

## 03/21/2007 CMIC: henrich

hold safety meeting, well on vac., tag @ 6209.5', pump 8 bfw to break circ., start milling, mill to 6212' in 4 hrs., lost circ. & fish went down hole 5.5' to 6217.5' & well started circulating again, well circulated for 30 min. & lost circulation again, mill on fish for 3 hrs. & did not make any hole or get circ. back, rd swivel, pooh, shoe had indications of having something 1'5" outside of shoe & 1' 10" inside of shoe, sisd.

#### 03/22/2007 CMIC: henrich

hold safety meeting,sip 200#,bleed down in 5 min.,rih w/6 1/8" sod concave mill,4 3/4" bumper sub,12-4 1/4" drill collars & 184 jts. 2 7/8" tbg.,tag @ 6216,ru power swivel,mill 1.5' to 6217.5' in 1.5 hrs.,start trying to drive fish down hole,fish wet down hole 11.5' in 3 hrs. to 6229' & quit going,rd swivel,pooh,mill was evenly worn about 50% on entire surface,rih w/6 1/8" sod x 4 1/16" mid kut-rite shoe,hyd. jars & 2-4 1/4" d.c.'s on 40 jts. 2 7/8" tbg.,sisd.

# 03/23/2007 CMIC: henrich

hold safety meeting,50# sip,bleed down,finish rih,tag @ 6229',ru power swivel,mill from 6229' to 6231.5' in 4 hrs..quit making hole,could get shoe to cut anymore(appeared to be worn out or spinning on something.rd swivel,pooh,shoe looked same as when rih except slight bevel on id,appears fish is parted & spinning,send replacement shoe in to have a row of diamonds put in close to bottom of shoe,will run it this am.

# 03/26/2007 CMIC: henrich

SIP 50 psi. Hold safety meeting. Run 6 1/8" SOD kutrite shoe with one row of diamonds 5" from crown, bumper sub, jars, collars, 194 jts tbg. Tag at 6231.5'. Could not work shoe over the top of anything. Start milling. Milled 1' to 6232.5' in 45 min. (stayed on bottom another 2 hours and made no hole). Trip out with shoe. Crown only 5% worn. Shows to have had something up tp tip of diamonds. (tip of diamonds were 5" from bottom of shoe. Diamonds were in to 3.5" circle, now approx 3 5/8 circle, and 4" from bottom shows possible 3 7/8 circle on diamonds. Shut down due to bad weather.

# 03/27/2007 CMIC: henrich

SICP 200 psi. Hold safety meeting. Blow well down. Run 5 7/8" shortcatch OS w/ 3 3/4" gr, bumper sub, jars, 2-4 1/4" collars, 194 jts tbg Tag @ 6232.5'. Latch onto fish. Jar off of fish with 1st hit. Latch back onto fish and set jars off 3 times and came off of fish. Trip out with overshot. Appears that fish only going 1" inside of grapple. (had metal shavings in bottom of grapple). Trip back in hole with same bottom hole assembly with 4" grapple. Tag @ 6232.5'. Appear to latch onto fish. Pull off at 12.000 over. Appear to latch right back on. again. Knock overshot down pretty hard. Pulled OS off # 15,000 over. Trip out with overshot. Had no markings inside of grapple, or on top bushing, or on outside of bowl. The only indication of touching the fish were a couple of shiny spots on bottom bevel of 4" grapple. Trip in hole with 6 1/8 SOD kutrite shoe with 5" mesh ID, jars, 2- 4 1/4" collars, 193 jts tbg. SION.

#### 03/28/2007 CMIC henrich

SIP 50 psi. Hold safety meeting. Tag @ 6232.5'. Start milling @ 7:30am. Made 1' to 6233.5' in 1st three hours. Mill 1/2' to 6234' in next 1 1/2 hours. Made no footage in last hour of milling. (made 1& 1/2' in 5 1/2 hours). Acted like shoe wore out or spinning. Trip out of hole with shoe. Shoe is in good shape, maybe 20% worn. Fish had been inside shoe 1'3". ID of shoe polished a little but still 5" ID. Run 5 7/8" shortcatch overshot with 4 1/2" grapple, bumper sub, jars, 2- 4 1/4" collars, 192 jts tbg. SION.

#### 03/29/2007 CMIC: henrich

SIP 10 psi. Hold safety meeting. Run 1jt tbg. Bottom of overshot stopped where shoe stopped @ 6234'. Latch onto fish. Pull up 15,000 over weight twice, then set jars off at 15,000 over. Came loose. Would take weight 1/2' before going back to the mark on tbg. Trip out with overshot. Recovered 1/2 of a piece of 5.5" shroud 2' long (1' of which was hanging out bottom of overshot). (This piece appeared not to have been jarred into, and indicated to me that it had been wedged beside another more solid piece). Run same overshot with same 4 1/2" grapple to catch other 1/2 piece of shroud. Bottom of overshot stopped @ 6234 again. Latch onto fish. Jar on fish for 50 min before jarring of off fish. Would not latch back onto fish. Lay down 2 jts tbg. SION.

#### 03/30/2007 CMIC: henrich

SIP 50 psi. Hold safety meeting. Trip out with overshot. Metal shavings in bottom 1/3 of OS grapple. Run same BHA with 4 3/8 grapple Bottom of OS stopped @ 6234'. (Latched on @ 6234'. Set jars off twice and popped off. Latch right back on and pull 10,000 over. Pop bumper sub closed to get better bite and knocked overshot down to 6235'. Set jars off 1 time and popped off. Come back down and stop at 6235' again. Did not act like it latched on. Pop bumper sub closed and knock downhole 1' each time. Knocked downhole total of 8 1/2' to 6242.5'. Would not go past 6245.5', pickup shows to be latched onto nothing. Pull back above 6234', and overshot would set down 1/2' high @ 6233.5'). Trip out with overshot. Overshot unmarked, but has traces of grey chalky substance from overshot to top of bumper sub.( possible 7" csg parted).(possible split 5.5" shroud). Discuss what to run. Trip in with csg spear, drill collar, stop sub, bumper sub, jars, collar, 194 jts tbg. Tag @ 6242.5' (bottom of spear). Pick up and have no bite. Go ahead and try to tap spear in deeper but would not go. Got bite and jarred 1 hour @ 25,000 over. Did not move anything. Hit one time @ 30,000 over and lost bite. Tag at 6245.5' again and latched up. Jarred another 45 min @ 25,000 over. Shut well in with spear still latched up. Never moved any thing up or down. SION

03/31/2007 CMIC: henrich

shut down

04/01/2007 CMIC: henrich

shut down

04/02/2007 CMIC: henrich

SIP 50 psi. Hold safety meeting. Close bumper sub and spear still sets at 6242.5'. Pump 100 bbls water down csg. Gained 1/2', spear sets down @ 6243'. Jar for 2 hours @ 25,000 over. Jarred spear loose. Spear now sets back down at 6242.5'. Would not catch again. Trip out with spear. Left part of spear grapple in hole (Length 1'1", width 4"). Run 6 1/8" SOD shoe, jars, 2- 4 1/4"collars, 194 jts tbg. Work shoe slowly thru spot @ 6233.5' and never saw anything. Continue in and tag 2 1/2' higher at 6240'. Swivel would stall every time shoe touched at 6240'. Took 45 min to get shoe down to 6242'. Working shoe up and down showed to be torque free above 6236', and showed a little increase in torque from 6236' to 6242'. Pull up to check up hole again. Shoe will tag repeatedly at 6233.5' if shoe is turning and slightly popped .There is something at 6233.5'.( top of a piece of shroud, or problem with 7" csg.). Pull above 6233.5'. SION.

## 04/03/2007 CMIC: henrich

hold safety meeting,200# sip,bleed down,ru power swivel,work shoe @ 6233.5' for 1 hr. & got shoe to take weight,mill on spot @ 6233.5' for 3 hrs.,never made any hole,pick up off spot & shoe would go right past spot like it wasn't there,but you can stop rotating & find spot,run down to 6242.5' & mill to 6243' in 2.5 hrs.,shoe not cutting,acts like fish is spinning,pump additional 100 bfw down tbg. & p/u to 6181',sisd.

# 04/04/2007 CMIC: henrich

hold safety meeting.sip 50#,bleed down,miru rotary wl,rih w/dhv camera,showed possible pated csg. @ 6233.5',small window cut in 7" csg. @ 6234' & 1/2 of 7" csg. collar cut away @ 6234',also shows top of 5.5" shroud @ 6243' w/curled up motor shaft approx. 12" above top of shroud,pooh,rd wl,pooh /tbg.,d.c.'s,jars,bumper sub & shoe(shoe 110% worn out)rih w/4 3/4" concave mill,bumper sub,2-4 1/4" d.c.'s & tbg.,tag up @ 6243',ru power swivel,torque shows something @ 6241' which goes up beside of mill (possible motor shaft)rotate mill @ 6241' trying to mill away shaft but cannot keep shaft under mill,run down to 6243' & start trying to knock fish down hole.made 2' to 6245' but got hung up & it took 20 mins. to work free,did not go back down & tag,pull up to 6220',sisd.

#### 04/05/2007 CMIC. henrich

hold safety meeting,20# sip,bleed down,rig power swivel down,lay down 195 jts. 2 7/8" tbg.,d.c.'s,bumper sub & concave mill,nd bop,nu wh.,clean loc.,move off loc.



# OCCIDENTAL PERMIAN LTD.

Field: McKittrick Hills Site: Eddy County, NM Well: Shelby 12 Fed #7

Wellpath: VH - Job #32K0806705

Survey: 08/31/06

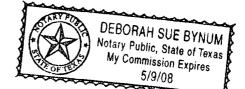
This survey is correct to the best of my knowledge and is supported by actual field data.

Rushauth Company Representative

Notorized this date <u>Hotel</u> of <u>Sptember</u>, 2006. <u>Leborah Sur Bynum</u>

Notary Signature County of Midland

State of Texas





# **Scientific Drilling International Survey Report**

Company: OCCIDENTAL PERMIAN LTD.

Field: Site:

McKittrick Hills Eddy County, NM

Well: Wellpath:

Shelby 12 Fed #7 VH - Job #32K0806705 Date: 09/25/2006

Time: 14:59:15 Co-ordinate(NE) Reference:

Vertical (TVD) Reference:

Section (VS) Reference:

**Survey Calculation Method:** 

Well (0.00N,0.00E,71.18Azi)

SITE 0.0

Minimum Curvature

Site: Eddy County, NM, Grid North

Db: Sybase

Survey:

Company:

08/31/06

KSRG 0'-4249'

Scientific Drilling Internatio Keeper;Keeper Surface Readout

**Start Date:** 

08/31/2006

Engineer: Tied-to:

Rehders/Rowe/Rando

From Surface

Tool:

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.0
100.00	0.34	227.72	100.00	-0.27	-0.20	-0.22	0.34	0.30	227.7
200 00	0.18	203.57	200.00	-0.65	-0.54	-0.50	0.19	0.74	222.7
300.00	0.18	99.13	300.00	-0.58	-0.72	-0.37	0.13	0.74	207.0
									157.4
400.00	0.55	90.01	400.00	0.05	-0.75	0.31	0.32	0.81	157.4
500.00	0.33	136.04	499.99	0.63	-0.96	0.99	0.40	1.38	134.0
600.00	0.13	179.80	599.99	0.72	-1.28	1 19	0.25	1.75	137.0
700.00	0.24	329.52	699.99	0.64	-1.21	1.09	0.36	1.63	138.1
800.00	0.60	348.09	799.99	0.66	-0.52	0.87	0.38	1.01	120.7
900.00	1.01	345.90	899.98	0.79	0.85	0.55	0.41	1.01	32.9
1000.00	1 01	3.42	999.96	1.20	2.58	0.39	0.31	2.61	8.5
1100.00	1 08	17.10	1099.95	2.09	4.36	0.72	0.26	4.42	9.3
1200.00	1.69	49.11	1199.92	4.01	6.23	2.11	0.96	6.58	18.7
1300.00	2.04	51.58	1299.87	7.05	8.30	4.62	0.36	9.50	29.0
1400.00	2.30	63.80	1399.79	10.72	10.29	7.81	0.53	12.92	37.2
1500 00	2.45	65.35	1499.71	14.83	12.07	11.56	0.16	16.71	43.7
1600.00	2.51	70.12	1599.61	19.15	13.71	15.56	0.10	20.73	48.6
1700.00	2.54	69.65	1699.52	23.55	15.22	19.69	0.21	24.89	52.3
1800.00	2.34		1799.43	27.79	16.67	23.68	0.04	24.69 28.96	54.8
		70.44			17.98		0.22		
1900.00	2.19	70.63	1899.35	31.72	17.98	27.39	0.13	32.76	56.7
2000.00	2.16	71.28	1999.28	35.52	19.22	30.98	0.04	36.45	58.1
2100.00	2.09	71.67	2099.21	39.23	20.40	34.49	0.07	40.07	59.4
2200.00	1.97	69.19	2199.15	42.77	21.58	37.83	0.15	43.55	60.3
2300.00	1 79	70.56	2299.09	46.05	22.71	40.91	0.19	46.79	60.9
2400.00	1.54	76.06	2399.05	48.95	23.56	43.69	0.30	49.63	61.6
2500.00	1.34	78.47	2499.02	51.45	24.11	46.14	0.21	52.06	62.4
2600.00	1.09	82.58	2599.00	53.54	24.47	48.22	0.26	54.08	63.1
2700.00	1.05	81.69	2698.98	55.37	24.72	50.07	0.04	55.85	63.7
2800.00	0.94	75.88	2798.96	57.09	25.06	51.78	0.15	57.52	64.1
2900.00	0.75	83.15	2898.95	58.55	25.34	53.22	0.22	58.94	64.5
3000.00	0.68	83.78	2998.95	59.77	25.48	54.46	0.07	60.13	64.9
3100.00	0.61	84.15	3098.94	60.87	25.60	55.58	0.07	61.19	65.2
3200.00	0.56	74.52	3198 93	61.87	25.78	56.58	0.11	62.18	65.5
3300.00	0 46	54.60	3298 93	62.75	26.14	57.38	0.11	63.05	65.5
3400.00	0.12	64.00	3398.93	63.23	26.42	57.80	0.34	63.55	65.4
3500.00	0.07	30 47	3498.93	63.38	26 52	57.93	0.07	63.71	65.4
3600.00	0.19	289 62	3598.93	63.30	26.63	57.80	0.07	63.64	65.2
3700.00	0.19	17.81	3698.93	63.27	26.84	57.70	0.21	63.63	65.2 65.0
3800.00									
3900.00	0.10 0.40	284.43 153.48	3798 93 3898.93	63.30 63.27	27.02 26.73	57.66 57.73	0.22 0.47	63.68 63.62	64.8 65.1
4000.00	0.67	175.15	3998.92	63.18	25.84	57.94	0.33	63.44	65.9
4100.00	1.75	156.72	4098.90	63.15	23.85	58.59	1.13	63.26	67.8
4200.00	1 28	183.67	4198.87	62.84	21.33	59.12	0.84	62.85	70.1
4249.00	1 56	183.88	4247.85	62.38	20.12	59.04	0.57	62.38	71 1

# **Survey Report**

Report Date: September 26, 2006

Client: OXY

Field: Eddy County, NM

Structure / Slot: Shelby 12 Fed #7 / Shelby 12 Fed #7

Well: Shelby 12 Fed #7 Borehole: Shelby 12 Fed #7

UWVAPI#:

Survey Name / Date: Sheiby 12 Fed #7\_surveys / September 5, 2006

Tort / AHD / DDI / ERD ratio: 66.058° / 922.29 ft / 4.789 / 0.108

Grid Coordinate System: NAD27 New Mexico State Planes, Eastern Zone, US Feet

Location Lat/Long: N 32 23 55.227, W 104 26 55.894
Location Grid N/E Y/X: N 508771.500 ftUS, E 464343.300 ftUS

Grid Convergence Angle: -0.06189984°
Grid Scale Factor: 0.99991055

Survey / DLS Computation Method: Minimum Curvature / Lubinski

Vertical Section Azimuth: 5.117°

Vertical Section Origin: N 0.000 ft, E 0.000 ft

TVD Reference Datum: RKB

TVD Reference Elevation: 0.0 ft relative to

Sea Bed / Ground Level Elevation: 0.000 ft relative to

Magnetic Declination: 8.551°

Magnetic Declination: 8.551°

Total Field Strength: 49139.792 nT

Magnetic Dip: 60.311°

Declination Date: September 05, 2006

Magnetic Declination Model: IGRF 2005 North Reference: Grid North

Total Corr Mag North -> Grid North: +8.613°
Local Coordinates Referenced To: Well Head

	Measured	Inclination	Azimuth	TVD	Vertical	NS	EW	Closure	Closure	DLS	Tool Face
Comments	Depth				Section				Azimuth		
7:010	(ft)	( deg )	(deg)	(ft)	(ft)	(ft)	(ft)	(ft)	( deg )	( deg/100 ft ) 0.00	(deg) -159.90M
Tie-In	4249.00 4301.00	1.56 0.90	183.88 200.10	4247.85 4299.84	25.31 24.21	20.12 19.03	59.04 58.85	62.38 61.86	71.18 72.08		-139.90M
	4333.00	0.60	233.10	4331.84	23.85	18.70	58.63	61.54	72.00	1.61	-102.10M
	4364.00	0.60	257.90	4362.83	23.69	18.56	58.35	61.23	72.35		-45.00M
	4396.00	0.80	315.00	4394.83	23.79	18.69	58.02	60.96	72.15	2.16	-22.70M
	4000.00	0.00	010.00	1001.00	20.70	70.00	00.02	00.00	72.10	2.10	22.70111
	4428.00	1.50	337.30	4426.83	24.30	19.23	57.70	60.82	71.57	2.56	-16.50M
	4459.00	2.20	343.50	4457.81	25.21	20.18	57.38	60.82	70.63	2.35	-13.00M
	4491.00	3.00	347.00	4489.78	26.58	21.58	57.02	60.96	69.27		-11.10M
	4522.00	3.90	348.90	4520.72	28.36	23.41	56.63	61.28	67.54	2.93	-10.80M
	4554.00	4.70	349.20	4552.63	30.67	25.76	56.18	61.80	65.36	2.50	-9.30M
	4586.00	5.40	350.70	4584.50	33.39	28.54	55.69	62.57	62.87	2.23	7.04G
	4618.00	5.90	351.30	4616.35	36.44	31.65	55.19	63.62	60.17	1.57	19.70G
	4649.00	6.30	352.60	4647.17	39.65	34.91	54.73	64.92	57.47	1.37	39.79G
	4681.00	6.70	355.40	4678.97	43.21	38.51	54.36	66.62	54.68	1.59	29.13G
	4713.00	7.20	357.60	4710.73	47.03	42.38	54.12	68.74	51.94	1.77	32.93G
	4744.00	7.40	358.60	4741.48	50.94	46.31	53.99	71.14	49.38	0.76	18.31G
	4776.00	7.90	359.80	4773.20	55.18	50.57	53.94	73.94	46.84		15.20G
	4808.00	8.50	0.90	4804.87	59.73	55.14	53.97	77.15	44.39	1.94	14.08G
	4840.00	9.00	1.70	4836.50	64.59	60.00	54.08	80.78	42.03	1.61	4.87G
	4871.00	9.80	2.10	4867.08	69.64	65.06	54.25	84.71	39.82	2.59	-12.12G
	4903.00	10.30	1.50	4898.59	75.22	70.64	54.42	89.17	37.61	1.60	0.00G
	4935.00	11.00	1.50	4930.04	81.12	76.56	54.58	94.02	35.48		0.00G
	4966.00	11.50	1.50	4960.44	87.15	82.60	54.73	99.09	33.53		-16.26G
	4998.00	12.00	0.80	4991.77	93.65	89.12	54.86	104.65	31.62	1.62	-35.12G
	5030.00	12.40	359.50	5023.05	100.39	95.88	54.88	110.47	29.79	1.52	-12.50G
	5062.00	12.80	359.10	5054.28	107.34	102.86	54.79	116.54	28.05	1.28	-16.83G
	5093 00	13.10	358.70	5084.49	114.24	109.80	54 66	122 66	26.46		48.92G
	5125.00	13.20	359.20	5115.65	121.48	117.08	54.53	129.16	24.97		0.00G
	5157.00	13.40	359.20	5146.79	128 80	124.44	54.42	135.82	23.62		13.33G
	5188.00	13.70	359.50	5176.93	136.03	131.71	54.34	142.48	22.42	0.99	180.00G
	5220.00	13.50	359.50	5208.03	143.52	139.23	54.28	149.44	21.30	0 62	90.00G
	5252.00	13.50	0.50	5239.15	150.96	146.70	54.28	156.42	20.30	0.73	125.92G
	5283.00	13.40	1 10	5269.30	158.15	153.91	54.38	163.23	19.46	0.55	54.67G
	5315.00	13.50	1.70	5300.42	165.57	161.35	54.56	170.33	18.68	0.54	138.46G
	5347.00	13.00	3.70	5331.57	172.90	168.68	54.90	177.39	18.03	2.12	161.63G
	5379.00	12.80	4.00	5362.76	180.04	175.80	55.38	184.32	17.49	0 66	90.00G
	5410.00	12.80		5392.99		182.65	55.88	191.01	17.01	0.21	-63.89G
	5442.00	12.90		5424.19		189.75	56.36	197.95	16.54		-54.05G
	5474.00	13.10		5455.37		196.94	56.71	204.95	16 06		-34.71G
	5505.00	13.30		5485.55		204.02	56.94	211 82	15 59		180.00G
	5537 00	13.00	1 60	5516.71	215.55	211.30	57.15	218.89	15.13	0.94	-90.00G
	5569.00	13.00		5547.89		218.49	57.32	225 89	14 70		-129.70G
	5601.00	12 80		5579.08		225.64	57.40	232.82	14.27		-57.63G
	5632.00	12.90		5609.31		232.53	57.37	239.50	13.86		6.47G
										5.50	

	Maa	1	Т		Variant				Clasura		
Comments	Measured Depth	Inclination	Azimuth	TVD	Vertical Section	NS	EW	Closure	Closure Azimuth	DLS	Tool Face
	(ft)	( deg )	(deg)	(#)	(ft)	(ft)	(ft)	(ft)	( deg )	( deg/100 ft )	( deg )
<u> </u>	5664.00	13.10	359.50	5640.49	243.88	239.73		246.48	13.44		-156.15G
	00000	10.10	000.00	00.0.10	2 .0.00	200170	• • • • • • • • • • • • • • • • • • • •				
	5696.00	12.80	358.90	5671.67	251.02	246.90	57.20	253.44	13.04	1.03	90.00G
	5727.00	12.80	359.00	5701.90	257.84	253.77	57.08	260.11	12.68	0.07	-90.00G
	5759.00	12.80	358.70	5733.11	264.89	260.85	56.94	266.99	12.31	0.21	0.00G
	5791.00	12.90	358.70	5764.30	271.96	267.97		273.92	11.96		-24.42G
								280.92	11.62	0.69	8.79G
	5823.00	13.10	358.30	5795.48	279.11	275.16	56.59	200.92	11.02	0.09	6.79G
	5854.00	13.40	358.50	5825.66	286.17	282.27	56.39	287.84	11.30	0.98	-155.66G
					293.45	289.60		294.99	10.97		-13.05G
	5886.00		357.90	5856.81							
	5918.00		357.60	5887.96	300.73	296.93		302.14	10.66		90.00G
	5950.00	13.40	358.30	5919.08	308.08	304.34	55.60	309.38	10.35		-13.14G
	5981.00	13.50	358.20	5949.23	315.24	311.54	55.38	316.43	10.08	0.33	178.43G
	6013.00		358.30	5980.40	322.44	318.79		323.53	9.82		
	6044.00	12.40	358.70	6010.66	329.13	325.53		330.14	9.59		180.00G
	6076.00	12.20	358.70	6041.93	335.91	332.34	54.83	336.84	9.37	0.62	180.00G
	6108.00		358.70	6073.22	342.57	339.05	54.68	343.43	9.16	0.62	180.00G
	6140.00		358.70	6104.53	349.13	345.65		349.92	8.97		
	6171.00			6134.88	355.40	351.95			8.77		
	6203.00	11.60	356.50	6166.22	361.79	358.41	53.98	362.45	8.57	0.70	-90.00G
	6235.00	11.60	355.60	6197.56	368.15	364.83	53.54	368.73	8.35	0.57	11.56G
	6266.00			6227.92	374.35	371.10		374.87	8.14	0.66	-5.93G
	6298.00			6259.23	380.86	377.68			7.93		
				50	007.40	004.04	50.40	227.00	7.70	0.00	00.000
	6330.00			6290.53	387.43	384.31			7.72		
	6362.00			6321.83	393.99	390.95			7.52		
	6393.00	11.70	357.50	6352.17	400.29	397.30	51.23	400.59	7.35	1.64	116.83G
	6425.00	11.60	358.50	6383.51	406.70	403.76	51.00	406.97	7.20	0.70	109.96G
	6457.00		1.50	6414.87	413.05	410.14	51.00	413.29	7.09	1.97	67.82G
	0.400.00	44.50	0.70	0440.00	440.00	445.00	E4 40	440.44	7.00	0.00	90.00G
	6483.00			6440.36	418.20	415.29			7.03		
	6515.00			6471.71	424.58	421.66			6.97		
	6547.00	11.60	3.60	6503.06	430.98	428.06			6.92		
	6578.00	11.70	2.50	6533.43	437.24	434.31	52.26	437.44	6.86	0.79	-130.24G
	6610.00	11.50	1.30	6564.77	443.66	440.74	52.48	443.85	6.79	0.98	-66.12G
		44.00		0500.40	450.05	447.45	50.50	450.00	0.70	0.70	00.000
	6642.00			6596.12	450.05	447.15			6.70		
	6673.00			6626.49	456.26	453.38			6.61		
	6705.00	11.40	1.60	6657.85	462.62	459.76	52.66	462.76	6.53	1.18	90.00G
	6737.00	11.40	2.80	6689.22	468.94	466.08	52.90	469.07	6.48	0.74	38.96G
	6768.00	11.60	3.60	6719.60	475.12	472.25	53.25	475.24	6.43	0.83	-90.00G
	6800.00			6750.94		478.67					
	6832.00			6782.28	488.00	485.13			6.34		
	6864.00			6813.62	494.48	491.61			6.29		
	6895.00	11.80	1.20	6843.97	500.78	497.92	54.36	500.88	6.23	0.91	-49.14G
	6927.00	12.00	0.10	6875.28	507.36	504.52	54.43	507.45	6.16	0.94	129.12G
	6050.00	44.00	0.70	COOF OF	E40 70	E40.04	E4 40	E40 00	6.00	0.54	-52.28G
	6958.00			6905.61	513.76	510.94			6.09		
	6990.00			6936.90		517.62					
	7022.00			6968.17	527.19	524 43			5.92		
	7054.00			6999.44		531.22			5.86	1.62	
	7085.00	12.00	4.30	7029.76	540.43	537.68	54.86	540.47	5.83	1.58	-111.02G
	7117.00	11.90	3 00	7061.06	547.05	544.29	55.28	547.09	5.80	0.90	129.36G
	7149.00			7092.38	553.62	550.85			5.77		
	7180.00			7122.72		557.21			5.73		
	7212.00			7154.03		563.84			5.68		
	7244.00	12.20	0.80	7185.32	573.28	570.54	56.23	573,31	5.63	0.68	40.83G
	7275.00	12.40	1.60	7215.61	579.87	577.15	56.37	579.89	5.58	0.85	-30.48G
	7307.00			7246.84	586.81	584.10		586.82	5 53		
	7339.00			7278.05	593.84	591.16		593.85	5.46		
	7371.00			7309.25	600.92	598.27			5.39		
	7402.00	13.20	357.80	7339.45	607.88	605.27	56.28	607.88	5.31	1 63	34.66G
	7434.00	13.30	358.10	7370.60	615.16	612.60	56.01	615.16	5.22	0.38	101.47G

Comments	Measured Depth	Inclination	Azimuth	TVD	Vertical Section	NS	EW	Closure	Closure Azimuth	DLS	Tool Face
	(ft)	( deg )	( deg )	(ft)	(ft)	(ft)	(ft)	(ft)	( deg )	( deg/100 ft )	( deg )
	7466.00	13.20	0.50	7401.75	622.45	619.93	55.92	622.45	5.15	1.75	145.83G
	7497.00	13.10	0.80	7431.93	629.48	626.99	56.00	629.48	5.10	0.39	73.25G
	7529.00	13.20	2.20	7463.10	636.75	634.26	56.19	636.75	5.06	1.04	-27.64G
	7561.00	13.70	1.10	7494.22	644.18	641.70	56.41	644.18	5.02	1.76	90.00G
	7593.00	13.70	1.30	7525.31	651.74	649.28	56.57	651.74	4.98	0.15	-38.61G
	7624.00	14.10	0.00	7555.40	659.16	656.73	56.65	659.16	4.93	1.64	-173.25G
	7656.00	13.70	359.80	7586.46	666.82	664.41	56.64	666.82	4.87	1.26	177.39G
	7688.00	13.20	359.90	7617.58	674.23	671.86	56.62	674.24	4.82	1.56	176.83G
	7719.00	12.80	0.00	7647.79	681.17	678.83	56.61	681.19	4.77	1.29	-32.28G
	7751.00	13.20	358.90	7678.97	688.34	686.03	56.54	688.35	4.71	1.47	-76.43G
	7783.00	13.30	357.20	7710.12	695.61	693.36	56.29	695.64	4.64	1.26	-61.96G
	7814.00	13.40	356.40	7740.28	702.70	700.50	55.89	702.73	4.56	0.68	-76.64G
	7846.00	13.50	354.70	7771.40	710.04	707 92	55.31	710.08	4.47	1.27	-69.93G
	7878.00	13.70	352.50	7802.51	717.41	715.40	54.47	717.47	4.35	1.73	143.93G
	7910.00	13.00	354.80	7833.64	724.65	722.74	53.65	724.73	4.25	2.75	127.67G
	7941.00	12.50	357.90	7863.88	731.40	729.57	53.21	731.50	4.17	2.73	85.60G
Intrepid Final TD	7973.00	12.60	2.00	7895.11	738.33	736.52	53.21	738.43	4.13	2.80	61.72G
Beginning of Scientific Gyros	8100.00	14.36	13.26	8018.63	767.75	765.70	57.30	767.84	4.28	2.48	160.67G
<b>G</b> yllos	8200.00	11.29	18.86	8116.13	789.54	787.03	63.31	789.58	4.60	3.31	136.68G
	8300.00	10.18	25.11	8214.38	807.36	804.30	70.23	807.36	4.99	1.61	17.42G
	8400.00	10.50	25.66	8312.76	824.20	820.52	77.93	824.21	5.43	0.33	148.86G
	8500.00	8.92	32.04	8411.32	839.64	835.30	85.98	839.72	5.88	1.91	-171.21G
	8600.00	7.70	30.63	8510.27	852.60	847.64	93.51	852.78	6.30	1.24	175.52G
End of Scientific Gyros	8622.00	7.50	30.75	8532.08	855.23	850.14	95.00	855.43	6.38	0.91	0.00G



# OCCIDENTAL PERMIAN LTD.

Field: McKittrick Hills Site: Eddy County, NM Well: Shelby 12 Fed #7 Wellpath: VH - Job #32K0906740

Survey: 09/13/06

This survey is correct to the be and is supported by actual fiel		vledge
Rlinari	љС	Company Representative
Notorized this date 29th of	October	, 2006.
Lleborah Sur Bynum Notary Signature		
Notary Signature		
County of Midland	\$ 6	DEBORAH SUE DVAN
State of Texas	36	DEBORAH SUE BYNUM Notary Public, State of Texas

DEBORAH SUE BYNUM Notary Public, State of Texas My Commission Expires 5/9/08



# **Scientific Drilling International Survey Report**

Company: OCCIDENTAL PERMIAN LTD.

Field:

McKittrick Hills

Site: Well:

Shelby 12 Fed #7 VH - Job #32K0906740

Eddy County, NM

Date: 10/29/2006

Vertical (TVD) Reference:

**Survey Calculation Method:** 

Section (VS) Reference:

Time: 15:09:50 Co-ordinate(NE) Reference:

Page:

Site: Eddy County, NM, Grid North

SITE 0.0

Well (0.00N,0.00E,5.12Azi) Minimum Curvature Db: Sybase

Wellpath: Survey:

09/13/06

KSRG 7973'-8622'

Scientific Drilling Internatio

**Start Date:** 

09/13/2006

Company: Tool:

Keeper; Keeper Surface Readout

Engineer: Tied-to:

Rehders/Rando **User Defined** 

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
7973.00	12.60	2.61	7895.10	738.32	736.51	53.20	0.00	738.43	4.13
8100.00	14.36	13.26	8018.62	767.75	765.68	57.44	2.39	767.84	4.29
8200.00	11.29	18.86	8116.11	789.55	787.02	63.45	3.31	789.58	4.61
8300.00	10.18	25.11	8214.36	807.36	804.29	70.37	1.61	807.36	5.00
8400.00	10.50	25.66	8312.74	824.20	820.50	78.06	0.33	824.21	5.43
8500.00	8.92	32.04	8411.31	839.64	835.29	86.12	1.91	839.72	5.89
8600.00	7.70	30.63	8510.26	852.60	847.63	93.65	1.24	852.79	6.30
8622.00	7.50	30.75	8532.06	855.23	850.13	95.14	0.91	855.44	6.39

Occidental Permian, LTD. Shelby 12 Fed. 7

Eddy Co., N.M.

508-0093

STATE OF NEW MEXICO DEVIATION REPORT

223	0.50
493	0.75
991	0.50
1,242	2.00
1,687	2.75
1,782	2.75
2,037	3.00
2,133	2.25
2,449	1.75
2,828	1.00
3,145	0.75
3,525	0.25
3,875	0.25

STATE OF TEXAS

**COUNTY OF MIDLAND** 

The foregoing instrument was acknowledged before me on Moore on behalf of Patterson-UTI Drilling Company LP, LLLP.

Notary Public for Midland County, Texas My Commission Expires: 4/08/07 September 21, 2006 , by Steve

