Form 3160-5 (August 2007)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS** 

Do not use this form for proposals to drill or to re-enter an

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5. Lease Serial No. SF-080384-b

6. If Indian, Allottee or Tribe Name

RCVD DEC 7'07

abandoned well.	Use Form 3160-3 ( <i>F</i>	(PD) for suc	h proposal	s.				
SUBMIT IN TRIPLICATE - Other instructions on page 2					7. If Unit of CA/Agreement, Name and/or No. OIL CONS. DIV.			
1. Type of Well  Gas W	ell Other NOV <b>3 0 2007</b>			8. Well Name and No. HICKMAN A No. 1E	DIST. 3			
2. Name of Operator MERRION OIL & GAS CORPORAT	ION			nt	9. API Well No 30-045-33936			
3a. Address 3b. Phone railing		3b. Phone Non( Fairming Non) 505-324-5300	nd Management <sub>In</sub> (in <u>clud</u> e@fe@code) 00		10. Field and Pool or Exploratory Area GALLEGOS GALLUP/BASIN DAKOTA			
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) 1070' FSL & 813' FEL SECTION 10, T26N, R12W, NMPM					11. Country or Parish, State SAN JUAN, NEW MEXICO			
12. CHEC	K THE APPROPRIATE BO	OX(ES) TO INDIC	CATE NATURI	E OF NOTIC	E, REPORT OR OTHER	R DATA		
TYPE OF SUBMISSION			TY	PE OF ACT	ION			
Notice of Intent	Acidize Alter Casing	Deeper Fractur	e Treat	Recla	uction (Start/Resume)	Water Shut-Off  Well Integrity  Other COMPLETION		
✓ Subsequent Report	Casing Repair Change Plans		onstruction ad Abandon		mplete oorarily Abandon	Other OOMPLETION		
Final Abandonment Notice	Convert to Injection	Plug B			r Disposal	Market		
Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)  10/18/07 Road rig and equipment from Fifield #1Z. MIRU Hurricane Service Rig #6 on 10/18/07. ND tubing head and NU BOP, spot pump, pit, frac tank and flow back tank. M&R unable to load tubing until after 2:00 pm (stuck on other jobs). SWI, secure location & SDON.  10/19/07 PU bit, sub and tubing. RIH and tag cement @ 4120' KB. Drill out cement and stage tool @ 4177' KB. Pull 5 stands and SDON.  10/20/07 RIH to float collar @ 6331' KB. Drill shoe joint. Torque up on guide shoe and fall through into rat hole. Well cleaned out to TD, circulate hole clean with 2% KCl. POOH standing back. SD for weekend.  10/22/07 Pick up single stand and RIH. Fill hole up w/ 2 bbl 2% KCl. Run GR/CCL. Set CIBP @ 6343' KB. RIH w/ 95 stands to 6313' KB (Kick out damaged joint #179, 32.50') and pressure up to 4000 psig on casing. Pressure falling off in spurts. Isolate pump to ensure pressure is not bleeding back through pump. Could not get positive pressure test. Pressure falls off to 1200 psig and holds. POOH w tubing and pick up packer. RIH and set @ 6316' Pressure up on tubing to 3000 psig. Very slow leak on backside. Unset packer and pick up. Packer will-not return to ACCEPTED FOR RECORD  ***CONTINUED OTHER SIDE****								
					,	FAREAMETCH FIELD OFFICE		
14 I hereby certify that the foregoing is to Name (Printed/Typed) STEVEN S. DUNN Signature	rue and correct	Title DRILLING & PRODUCTION MANAGER  Date 29 NOO 07						
THIS SPACE FOR FEDERAL OR STATE OFFICE USE								
Approved by			Title		Da	te		
Conditions of approval, if any, are attached that the applicant holds legal or equitable tentitle the applicant to conduct operations	itle to those rights in the subje	s not warrant or cerect lease which wou	tify		,	,		

fictitious or fraudulent statements or representations as to any matter within its jurisdiction

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,

10/23/07

Found well with SICP 0 psi. Release packer and TIH to 6334'. Leave packer un-set, RU Pace Pumping Services and spot 250 gals of 15% HCl acid (with inhibitors). Displace acid with 22 bbls of 2% KCl water. TOH with tubing and packer. RU Weatherford wireline and held safety meeting. RIH with 3-1/8" casing gun and perforate the Burro Canyon 3 spf at the following depths: 6318'-6326' (120° phasing - total of 24 holes - EHD: 0.39"). RD and release Weatherford. TIH with 4½" packer on 2-3/8" tubing, set packer at 5800' KB. RU Pace Pumping Services, load and break formation with 2% KCl, formation broke at 3150 psi while pumping 0.5 BPM. Pump acid into perforations, pump additional 6 bbls of 2% KCl into formation at 1600 psi at 1.5 BPM. ISIP: 650 psi. 5 min 0 psi. RUTS. Initial fluid level was at surface, made 17 runs and recovered ~85 bbls of fluid in 3.5 hrs. Final fluid level was 750'. On runs 10 thru 17, well would flow gas and water for ~5 mins before dying. SWI, secure location & SDON.

10/24/07

Found well with SITP 20 psi. Release pressure and TIH. RIH with swab and hit fluid level at 700', made 9 runs and recovered ~60 bbls of fluid in 1.5 hrs. Final fluid level was 750'. Release packer and TOH, broke hydraulic hose on rig. Shut down and get parts from town to repair. Continue TOH with packer. RU Weatherford Wireline and held safety meeting. RIH with CIBP and set at 6300', TIH with 4-1/2" RCP. RU Pace Pumping Service and isolate casing leak between 4135' and 4201', (D. tool at 4177' KB, losing ~50-60 psi /min). Slowly bleed down to 1500 psi, casing above and below DV tool tested to 3000 psi and held OK. Continue TIH to 6241' KB. Spot 250 gals of 15% HCl acid (with surfactant and inhibitors). Displace acid with 21.5 bbls of 2% KCl water. TOH with tubing and packer. RIH with 3-1/8" casing gun and perforate the Lower Dakota 3 spf at the following depths: 6242'-6250' (120° phasing - total of 24 holes - EHD: 0.39"). RD and release Weatherford. Load and break formation with 2% KCl. Formation broke at 3100 psi while pumping 0.5 bpm. Pump acid into perforations. Pump additional 6 bbls of 2% KCl into formation at 1800 psi at 1.5 bpm. ISDP: 1400 psi, 5 min: 1360 psi, 10 min: 1240 psi, 15 min: 1190 psi. Bleed off pressure and RD Pace. RIH with 4-1/2" RCP on 10 stands. SWI, secure location & SDON.

10/25/07

Found well with SITP & SICP: 0 psi. Continue TIH. Set packer at 6201' KB. RUTS. RIH with swab. Initial fluid level was 300'. Made 23 runs in ~5.5 hours and recovered ~115 bbls of fluid. Fluid level on last run was 650'. RD swab equipment. Release packer and TOH. SWI, secure location & SDON.

10/26/07

Found well with SICP: 0 psi. RU Weatherford Wireline, RIH with CIBP set CIBP at 6230. RIH with 3-1/8" casing gun and perforate the Dakota formation 2 SPF at the following depths: 6140'-6156' & 6164'-6180' (120° phasing, total of 64 holes, EHD: 0.39"). RD and release Weatherford. TIH with 4-1/2" RCP, set packer at 5933' KB. RU Pace Pumping Service and held safety meeting. Pressure test pumps and lines to 4500 psi, load and break Dakota formation with 2% KCI. Formation broke at 3010 psi while pumping 0.5 bpm. Pump 750 gals of 15% HCl acid. Ball gun malfunctioned after dropping 17 ea. 1.3 SG RC ball sealers. Continued pumping acid and displaced with 30 bbls of 2% KCI. Had several good breaks, increasing rate with each break from 0.5 bpm to 4 bpm. Pumped into formation at 2750 psi while pumping 4 bpm, ISDP: 1600 psi. After 30 mins well still holding 800 psi. RD and release Pace. RU flow back manifold to reserve pit and open tubing thru ¼" choke. Well flowed back water/gas for 1.25 hrs then died. Release packer and TIH to 6200'. Pulled back up to 5933' and re-set packer. RUTS. Initial fluid level was 100'. Made 5 runs and recovered ~ 20 bbls of fluid. Final fluid level was ~2,900'. SWI, secure location & SD for weekend.

10/29/07

Found well with SITP: 80 psi. RIH with swab, FL level at surface, made 18 runs and recovered ~100 bbls of fluid. Fluid level on 18<sup>th</sup> run was 5810'. Shut down for 1 hr. RIH and hit fluid level at 2600'. Made 9 more runs and recovered another 50 bbls of fluid (total of 150 bbls for the day). Fluid level after last run was down to 5000'. Shut well in, secure location & SDON.

10/30/07

Found the well dead. Released the packer and TOH with 95 stands of tubing. Rigged up Weatherford and set a 4-1/2" CIBP at 6124' KB. Perforated the Graneros at 6024 – 6035' KB with 3 spf for a total of 33 (0.39" and 120° phasing) holes. TIH with the packer and set it at 6070' KB. Rigged up Pace. Loaded the tubing and pressure tested the CIBP and packer to 3,500 psi – held OK. Released the packed and POH with one stand of tubing. Reset the packer at 6004' KB. Pace broke the formation at 2,850 psi at 1.5 BPM with water. Spearheaded 500 gal of 15% HCl acid. Injection pressures were constant at 2320 psi at 4.0 BPM as the acid passed through the perfs. Flushed the acid into the formation with 25 bbls of 2% KCl water. Job completed at 1215 hrs 10/30/07. ISIP: 1320 psi, 5 min.: 1190 psi, 10 min: 1150 psi, 15 min: 1120 psi. Opened the well to the reserve pit through a ¼" choke at 1240 hrs. Flowed water for 35 min before dying. RUTS. Initial fluid level was at surface. Made 6 runs and recovered ~ 37 bbls. Well swabbed down to seating nipple. SWI, secure location & SDON.

10/31/07

Found well with SICP: 0 psi. RIH with swab, hit fluid level at 1150'. Swab well down to seating nipple (6040') in 6 runs, fluid level on last run was 5936'. Recovered ~22 bbls of fluid, SD for 1 hr. RIH with swab and hit fluid level at 5110'. RD swab equipment. Release packer and TOH, laying down tubing on trailer. ND BOP & NU WH. RD MOL. Frac scheduled for 11/7/07. Note: Moved in 5 additional frac tanks and filled 3 with 2% KCL, will start filling the remaining 2 tanks.

## ATTACHMENT TO FORM 3160-5 Page Three

- RU Weatherford Fracturing and hold safety meeting. Pressure test pumps and lines to 5200 psi. Pumped 17,000 gals pad of 20# x-link "Dyna-Frac" gel. Frac well with 53,000# of 20/40 Super LC (resin coated) sand in 20# x-link "Dyna-Frac" gel. Pumped sand in 1, 2, 3 & 4 ppg stages at 30 BPM, AIR: 30 BPM, MIR: 30 BPM, ATP: 2212 psi, MTP: 2605 psi, job complete at 14:14 hrs 11/7/07. Total fluid pumped: 1061 bbls. ISDP: 1951 psi, 5 mins: 1572 psi, 10 mins: 1478 psi, 15 mins: 1428 psi. Nolte plot was flat or slightly positive throughout job. Final frac gradient: 0.73 psi/ft. SWI & RD Weatherford. RU flow back lines and open well thru 1/4" choke at 16:30 hrs 11/7/07. Initial pressure was 850 psi. Flowing back broken gel water. After 1 hr, pressure was down to 625 psi and still flowing back broken gel water (making ~60 bwph). Secure location and turn over to night watch/flow back.
- Pressure slowly decreased f' 650 psi down to 120 psi by 06:30 am. Recovered 245 bbls of broken frac gel. Well still flowing back ~ 8 bwph. SWI. RU Weatherford Wireline and RIH with 4-1/2" composite frac plug, set plug at 5320'. RIH with 3-1/8" casing gun and perforate the Gallup formation 1 spf at the following depths: 5007', 18', 21', 5106', 5110', 12', 29', 75', 83', 5217'- 24', 5228'-30', 5240'-50' total of 31 holes (0.39" EHD). RU Weatherford Fracturing and held safety meeting. Pressure test pumps and lines to 5200 psi. Pumped 17,000 gals pad of 20# x-link "Dyna-Frac" gel in 70Q foam. Frac well with 120,000# of 20/40 BASF sand in 20# x-link "Dyna-Frac" 70Q foam. Pumped sand in 1, 2, 3 & 4 ppg stages at 30 BPM. AIR: 30 BPM (DH), MIR: 30 BPM (DH), ATP: 2790 psi, MTP: 2860 psi. Job complete at 16:15 hrs 11/8/07. Total fluid pumped: 582 bbls. ISDP: 2056 psi. Nolte plot was positive throughout job. Final frac gradient: 0.84 psi/ft. Shut well in and RD Weatherford. RU flow back lines and open well thru 1/4" choke at 19:00 hrs 11/8/07. Initial pressure was 1600 psi. Flowing back foam and nitrogen with little to no sand. Secure location and turn over to night watch/flow back. Well continued to flow back throughout the night. Pressure was down to 50 psi by 06:00 hrs 11/9/07. Recovered ~50 bbls of fluid since starting flow back, very little sand. Shut well in at 06:30 hrs.
- Found well with 0 psi. ND frac valve, NU WH and BOP, spot tubing trailer, air package, pump and pit. PU 3-7/8" bit and bit sub. TIH on 2-3/8" tubing (tally and rabbit on way in). Stop at 3200' and RU air package and flow lines. Unload hole with 1200 scfm. Continue TIH to BP at 5320' (no sand/fill). PU power swivel, break circulation with air/mist (1200 scfm, 10 bwph with 2 gph of soap). Drill out frac plug in 45 mins, continue in hole to 5410'. Running out of daylight. Cut mist and dry up hole (making lots of fluid), made ~ 145 bbls of fluid since drilling out the plug. Blow hole for 30 mins. Cut air and lay down swivel. Pull up to string float at 4988' (above top perf). SWI, secure location and SDON.
- 11/13/07 Found well with SICP: 490 psi. Bleed off pressure and TIH to 6108' (PBTD at 6124'). Clean out frac sand/fill down to 6124'. Cut mist and blow hole. Well making heavy water/broken frac gel. Continue to blow hole for remainder of day. Well making ~ 90-110 BWPH (mostly broken gel), recovered 670 bbls of fluid for the day. Cut air (well continued to flow at approximately the same rate. Pull up to string float at 4988'. SWI, secure location and SDON.
- 11/14/07 Found well with SICP: 560 psi. Bleed off pressure and TIH to PBTD at 6124'. No fill. Unload hole with air package. Took nearly 1 hr to unload hole. Pull up to 6094 and blow hole with air package. Well making 50 70 bwph (mostly broken gel). Continued to blow hole for remainder of day. Recovered 328 bbls of fluid for the day. Cut air and pull up to string float at 4988'. SWI, secure location and SDON.
- Note: Total fluid pumped for both stages: 1,643 bbls, total fluid recovered: 1,213 bbls, fluid to be recovered: 430 bbls.
- 11/15/07 Found well with SICP: 560 psi. Bleed off pressure and TIH to PBTD at 6124'. No fill. Unload hole with air package (recovered 46 bbls of fluid unloading hole). Pull up to 6094 and blow hole with air package for 1 hour (recovered 37 bbls of fluid in hr). Cut air, RD and release air package. TOH, PU 4-1/2" Weatherford HD packer and TIH set packer at 5981'. Perfd Graneros: 6024'-6035' and Gallup perfs: 5007'-5250'. RUTS. Initial fluid level was 2000'. Final fluid level was 2900'. Swab back a total of 29 bbls of fluid. Out of daylight. SWI, secure location and SDON. Total fluid recovered for the day: 112 bbls.
- Found well with SICP: 40 psi, SITP: 60 psi. Bleed off pressure. RIH with swab. Initial fluid level was 1800'. Made 4 runs and fluid level was 1800' each time. Run 5 run: fluid level was 2000'. Run 6: fluid level was 2400'. Runs 7-9: fluid level was 2600'. Runs 10-12: fluid level was 2800'. Runs 13 and 14: fluid level was 3000'. Swabbed back a total of 98 bbls of fluid in ~ 6.5 hrs. Well making ~ 15 bwph or 362 bwpd. Secure location, SWI and SD for weekend.
- Note: Scheduled wireline to set CIBP on Monday.
- 11/19/07 Found well w/ SICP: 10 psi. Release packer and TOH. RU Black Warrior Wireline and set CIBP at 5976' KB. RD and release BWWC. TIH w/ cut off tail jt, perforated sub, seating nipple and 170 jts (5300.95') of 2-3/8", J-55, EUE, used tubing. Land tubing in wellhead w/ donut. Bottom of tubing landed at 5314' KB, seating nipple at 5290' KB. ND BOP and NU WH. RUTS. Made 8 runs and recovered ~ 17 bbls of fluid (very dirty w/ solids). Initial fluid level was 2500'. After 8<sup>th</sup> run, fluid level was still at 2500'. SWI, secure location and SDON.
- Found well with SICP: 15 psi. RIH with swab and hit fluid level at 2000'. Made 7 runs and recovered ~35 bbls of fluid. RD swab equipment and ready rig to run rods. RIH with pump and rod string as follows: 2" x 1-1/4" x 12' RHAC pump (Energy Pump), 40 ea. 3/4" plain rods, 97 ea. 5/8" plain rods, 73 ea. 3/4" scrapered rods, 1 ea. 8', 1 ea. 6' and 1 ea. 4' pony sub. Install polish rod and stuffing box. Load tubing with water and pressure test tubing and pump to 500 psi held OK. Release pressure and check pump action with rig looked OK. NU horse head and bridle. Space out pump and hang off rods. Start pumping unit and adjust tag. Well pumping OK. Turn over to T. Merilatt, will stay rigged up over Thanksgiving Holiday. If pumping OK will RD and MOL on 11/26/07.

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