Form 3160-5 UNITED STATES Across	JASUBMIT (NETROPLICATES	Form approved.  Budget Bureau No. 1004-c Expires August 31, 1085
(November 1983) (Formerly 9–331)  DEPARTMENT OF THE INTERIOR verse side:  BUREAU OF LAND MANAGEMENT		5. CEASE DESIGNATION AND SERIAL
		LC-029387-A
SUNDRY NOTICES AND REPORTS ON (Do not use this form for proposals to drill or to deepen or plug back use "APPLICATION FOR PERMIT—" for such proposals		6 IF INDIAN, ALLOTTEE OR TRIBE 'A.
OIL XX GAS OTHER		7. UNIT AGREEMENT NAME
NAME OF OPERATOR Southland Royalty Company	RECEIVED BY	8. FARM OR LEASE NAME Shugart "A"
ADDRESS OF OPERATOR 21 Desta Drive, Midland, Texas 79705	MAY 20 1987	9 WELL NO.
LOCATION OF WELL (Report location clearly and in accordance with any Sa See also space 17 below.) At surface	te requiremente. D.  ARTESIA OFFICE	10. FIELD AND POOL OR WILDCAT Shugart (Y, SR, Q, G)
330' FSL & 1650' FEL, Sec. 29, T-18-S, R-31 E		11. SBC., T., E., M., OR BLE. AND SURVEY OR ARMA
, <u>, , , , , , , , , , , , , , , , , , </u>		Sec. 29, T-18-S, R-
4. PERMIT NO. 15 ELEVATIONS (Show whether DF, RT. U	nknown	12. COUNTY OR PARISH 13. STATE Eddy N.M.
6. Check Appropriate Box To Indicate Nati	ure of Notice, Report, or C	Other Data
NOTICE OF INTENTION TO:	SC BSEQ!	DENT ESPORT OF:
TEST WATER SHUT-OFF PULL OR ALTER (ASING	WATER SHUT OFF	REPAIRING WELL
SHOOT OR ACIDIZE  SHOOT OR ACIDIZE  ABANDON®	FRACTURE TREATMENT	ALTERING CASING
REPAIR WELL CHANGE PLANS	Other) Complete Que	een & Penrose XX
See Attached Procedure		
		. • <u>:</u>
ACCEPTED FOR RECORD		
1 0 1007		
MAY 1 8 1987		
S	JS	•
CARLSBAD, NEW MEXICO		e de la companya de La companya de la co
•		
I hereby certify that the foregoing is true and correct		
SIGNED TITLE Engine		-11/10-
	eering Tech III	5/14/87 
(This space for Federal or State office use)	eering Tech III	5/14/87

- 1.) TIH W/4 3/4" BIT & DC's. MIRUPU. NU BOP. GIH W/5 1/2" RBP & TBG. SET RBP @ 2400'. PRESS RBP & 5 1/2" CSG TO 1000#. POH W/TBG & RETRIEVING HEAD. DUMP 2 SX SND ON RBP. PERF 2 SHOT SQZ GUN 850'. RU PMP TRUCK. EST CIRC THRU SQZ HOLES @ 850' IN 5 1/2" TO SURF, OUT 5 1/2" 8 5/8" ANNULUS. NU ON 5 1/2" CSG. PMP 200 SX CL "C". DISPL TO 775'. DID NOT CIRC. WOC.
- 2.) TEMP SURVEY @ 500'. RIH W/4 3/4" MILL TOOTH BIT, DC'S & TBG. TAG CMT 750'. DO GOOD CMT TO 853'. FELL FREE. TEST SQZ TO 500#. POH. GIH WITH RETRIEVING HEAD & TBG. CIRC SND OFF RBP. LATCH ONTO RBP & RELEASE. GIH W/BIT, DC'S & TBG. TAG 5 1/2" GUIDE SHOE 2793'. DO SHOE 2794'. VOID TO 2798'. DRL 2' WOOD 2798-2800'. DRL FORM 2800-24'.
- 3.) DRL FORM 2824-50', WOOD & GRAVEL FROM 2850-3029'. CLEANED OUT 205'. POH W/BIT.
- 4.) RIH W/4 3/4" BLADE BIT, DC'S & TBG.
- 5.) RIH W/MILL TOOTH BIT. RIH W/BLADE BIT, DC'S & WS. DRLD WOOD, TIN & GRAVEL FROM 3029-85'. POH W/BIT. RIH W/NOTCHED COLLAR & WS. WASH FORM & GRAVEL FROM 3085' TO 3095'. POH W/TBG.
- 6.) DRLG. GRAVEL. RIH W/BIT, DC'S & WS. DRLD GRAVEL, TIN & METAL FROM 3095-3121'. TOH FOR PLUGGED BIT. RIH W/BIT. DRLD GRAVEL & SND FROM 3121-3245'. CIRC CLEAN.
- 7.) TIH W/BIT. DRLD GRAVEL FROM 3245-3567'. POH W/BIT TO CHECK.
- 8.) RIH TO LD WS. RIH W/BIT, DC'S & WS. DRLD OUT GRAVEL 3567-63'. CIRC CLEAN. POH W/TBG. RAN COMP NEUTRON-GR LOG 3763-2600'.
- 9.) RIH W/ BIT & TBG. TAG TD @ 3763'. POH LD WS & DC'S. RIH W/4' SHOE JT, FLOAT SHOE, FC & 92 JTS. 4" 10.46# SEAL TECH STF CSG. SET CSG @ 3763'. CMT W/475 SX CL "C" 50-50 POZ. PD @ 5:45 p.m. 4/10/87. CMT CIRC 25 SX. WOC.
- 10.) RU TO RIH OE. TAG BTM. DISP W/KCL & RUN CBL.
- 11.) RIH W/PKR. RIH OE W/2 1/16" TBG. TAG BTM @ 3752'. DISPL W/2% KCL WTR. POH W/TBG. TEST CSG TO 3000#. RIH W/CBL 3738-2300' (GOOD BOND). PERF 3672-43' 2 JSPF (56 holes).
- 12.) POH W/TBG. RIH W/4" PKR & TBG. SPOT 200 GALS 15% NEFE HCL @ 3743'. PULL & SET PKR @ 3611'. PMP SPOT ACID AWAY. FORM BROKE @ 2800#. ACDZ W/2000 GALS USING 96 BS. MAX TRTG PRESS 3400#, MIN 2600#, AVG 2900#. AIR 3.5 BPM. ISIP 1800#, 5 MIN 1700#, 10 MIN 1600#, FSIP 15 MIN 1600#. SWB TEST. IFL @ SURF. REC 70 BLW IN 8 HRS. FFL @ 3500' FS. CUTTING 1% OIL.

- 13.) RU TO BLEED OFF PRESS. SITP 50#. OPEN WELL TO PIT. HAD SLIGHT SHW OIL. SWBD 9 BLW W/TR OIL. SWBD DRY. FFL 3500' FS. POH W/TBG & PKR. FRAC PERFS 3672-3743' W/27,000 GALS 30# x-LINK GEL & 63,000# 12/20 SND. MAX TRTG PRESS 3000#, MIN 2600#, AVG 2700#. AIR 20 BPM. ISIP 2200#, 5 MIN 1900#, 10 MIN 1800#, FSIP 15 MIN 1800#.
- 14.) FLWG BACK AFTER FRAC TO TEST TANK. SITP 1250# FTP 0-40# ON 2" CK. FLWD BACK 7 BO, 685 BLW & 170 BFW IN 24 HRS. MAKING 20 BTF/HR & 5% OIL CUT. WELL FLWD TO TEST TANK OVERNITE.
- 15.) TOH W/TBG & PKR. WELL DEAD THIS AM. FLWD 291 BFW & 12 BO IN 24 HRS. ON 3/4" CK. FLWG BY HEADS. TOH W/TBG & PKR. RIH OE W/WORKSTRING. TAG SAND @ 3742'. POH W/TBG. RAN RA TRACER & TEMP LOG. INDICATED 85% FLOW FROM BTM SET PERFS 3730-3743'. SI TRACER INDICATED CROSS FLOW OUT OF PERFS 3730-43' INTO PERFS 3672-3696'. FLUID OPEN TO TEST TANK.
- 16.) FLWD 230 BFW & 8 BO IN 20 HRS. RIH W/4" RBP, PKR & TBG. SET RBP @ 3718'. STOPPED WTR FLW TEMPORARILY. WTR FLW RETURNED SAME AS BEFORE. SET PKR @ 3715'. TEST RBP. OK. POH W/TBG. PERFS COMMUNICATED.
- 17.) RU TO RIH W/CMT RET ON ELEC LINE.
- 18.) RIH W/TBG & WL GRAPPLE. RU CRC. RIH W/4" CIBP. SET @ 3620'. RIH W/TBG TO 3532'. DISPL CSG W/2% KCL. SPOTTED 200 GALS 15% HCL. POH W/TBG. RIH W/PERF GUN. PERF 3512-3532' 2 JSPF (28 HOLES). STARTED IN HOLE W/PERF GUN. ELEC LINE PARTED. LEFT 850' ELEC LINE (7/16"), 1 1/16" GR TOOL & 20' PERF GUN IN HOLE. RIH W/2 PRONG WL GRAPPLE & TBG. TAG LINE @ 2865'. REC 100' ELEC LINE. RIH W/TBG & GRAPPLE. TAGGED ELEC LINE @ 2900'. POH REC 75' ELEC LINE. PMP ACID AWAY. PERFS BROKE @ 2350# @ .8 BPM @ 1900#. ISIP 1850#, 5 MIN 1800#, 10 MIN 1750#, FSIP 15 MIN 1700#.
- 19.) WORKING STUCK TBG. RIH W/TBG & 2 PRONG GRAPPLE. TAG ELEC LINE @ 2965' & POH. REC 10' ELEC LINE. RIH W/GRAPPLE. TAG FISH @ 2985'. POH. REC 50' ELEC LINE. RIH W/GRAPPLE. TAG FISH @ 3000'. POH. REC 30' ELEC LINE. RIH W/CENTER SPEAR. TAG FISH @ 3200'. POH. REC 50' ELEC LINE. RIH W/WL CENTER SPEAR. TAGGED FISH @ 3350'. SPEAR HUNG UP. WORKED FISH UP HOLE 25' TO 3325'.
- 20.) WORKING STUCK TBG. WORKED STUCK TBG & ELEC LINE. WORK FROM 3325' UP TO 3310'. PMPD DWN CSG & WORKED DWN TO 3500'. WORKED BACK UP TO 3388' @ END OF DAY.
- 21.) GIH W/GRAPPLE, DC'S & BUMPER SUB. SICP 300#. SHW OF OIL & GAS. RIH W/FREE POINT TOOL. TAGGED BTM @ 3383'. 100% FREE @ 3379' BACKED OFF W/STRING SHOT @ 3323'. POH W/TBG. LEFT 2 JTS TBG & WL SPEAR IN HOLE (ON TOP OF ORIGINAL FISH). RIH W/2 1/16" 10 RD IJ 2 3/8" 4.7# EUE 8RD X-OVER ON 107 JTS WL. 8' ABOVE TOP OF 2 1/16" TBG. POH.
- 22.) RIH W/3 1/8" OS. RIH W/2 PRONG WL GRAPPLE, DC'S, 3 1/8" BUMPER SUB, ON TBG. TAG @ 3315'. POH. REC 100' WL. RIH W/SAME AS ABOVE. TAG @ 3323'. POH. NO REC. RIH WITH 2 1/16" 10RD IJ PIN BY 2 3/8" 8RD

- x-OVER, DC'S & 3 1/8" BUMPER SUB ON TBG. TAG @ 3323'. ATTEMPTED TO SCREW INTO 2 1/16" FISH W/O SUCCESS. POH. REDRESS X-OVER. RETURN IN HOLE W/SAME. SCREWED INTO 2 1/16" FISH. WORKED PIPE. PULLED OUT OF FISH @ 36,000#. POH.
- 23.) RIH W/3 1/8" OS W/2 1/4" GRAPPLE, DC'S, 3 1/8" BUMPER SUB, ON TBG. CAUGHT 2 1/16" FISH @ 3323'. PULL TO 40,000#. GRAPPLE BROKE. POH. REDRESSED OS. RETURN IN HOLE. CAUGHT 2 1/16" FISH. PULLED TO 60,000#. BROKE GRAPPLE & OS. POH. RIH W/2 1/8" OS & BUMPER SUB.
- 24.) RIH W/ MILL, DC & BUMPER SUB. RIH W/3 1/8" OS, 2 1/4" GRAPPLE & WS. CAUGHT FISH @ 3323'. RIH W/STRING SHOT. TOOL WOULD NOT GO INSIDE 2 1/16" TBG. RLSE OS. POH W/TBG. RIH W/3 1/8" CONCAVE MILL, DC, 3 1/8" BS & WS. CUT OVER TBG 18". POH W/TBG. RIH W/3 1/8" OS W/2 1/16" GRAPPLE, DC & BS W/2 3/8" N-80 WS. CAUGHT FISH. PMP & WORK DOWN HOLE TO 3420' WORKED UP HOLE TO 3350'. TBG PARTED. POH W/TBG. REC 2 JTS 2 1/16" TBG. LEFT SN, X-OVER & 2' X 7/8" WL SPEAR IN HOLE.
- 25.) RIH W/PKR. RIH W/3 1/8" CONCAVE MILL, DC'S & 3 1/8" BUMPER SUB ON WS. TAG @ 3350'. MOVE DOWNHOLE TO 3570'. POH WITH TBG.
- 26.) SWBG. RIH W/4" PKR & TBG. SET PKR @ 3350'. ACDZ PERFS 3512-32' W/1500 GALS & 48 BS. MAX TRTG PRESS 4400# (BALL975 out), MIN 2200#, AVG. 3000#. AIR 2.6 BPM. ISIP 2000#, 5 MIN 1950#, 10 MIN 1900#, FSIP 15 MIN 1900#. 51 BLWTR. SWB TEST. IFL @ SURF. REC 34 BLW IN 5 1/2 HRS. FFL @ 3200' FS 10% OIL CUT LAST 2 RUNS.
- 27.) RU TO FRAC. SITP 380#. SWB TEST. IFL 300' FS. IN 10 1/2 HRS REC 3 BO, 17 BLW & 4 BF2. SDFN. IFL @ 300' FS. FFL 3300' FS.
- 28.) RU TO OPEN WELL & FLW BACK AFTER FRAC. SITP 180#. MADE 1 SWB RUN. IFL 1000' FS. REC 500' FREE OIL. FRAC PERFS 3512-32' W/20,000 GALS 30# X-LINK GEL & KCL WTR W/7000# 20/40 SND & 41000# 12/20 SND. SCREENED OUT ON 3# GAL 12/20 SND, 7000# 20/40 SND & 10,000# 12/20 SND IN FORM. FLUSH TO PERFS. MAX TRTG PRESS 3700#, MIN 2300#, AVG. 2400#. AIR 12 BPM. ISIP 2200#, 5 MIN 2050#, 10 MIN 2000#, FSIP 15 MIN 2000#.
- 29.) FLW BACK AFTER FRAC. SICP 1325#. RU TO COME UP HOLE TO PERF QUEEN.
- 30.) SWBG. PERF (QUEEN) 3259-3295' W/2 5/8" GAMMA GUN 2 JSPF (57 HOLES). RIH W/RTTS PKR, RBP & 2 3/8" WS. SET RBP @ 3418'. TEST RBP TO 3000#. PULL PKR TO 3295'. DISPL CSG W/2% KCL. SPOT 200 GALS 15% NEFE HCL. PULL PKR TO 3169'. REV & SET. BREAK FORM. ACDZ W/2500 GALS 7 1/2% HCL USING 120-7/8" BS. MAX TRTG PRESS 4500# (BALL OUT), MIN 2100#, AVG 2600#, AIR 4 BPM, ISIP 2000#, 5 MIN 1850#, 10 MIN 1800#, FSIP 15 MIN 1800#. 87 BLWTR. SWB TEST. IFL @ SURF. IN 6 HRS REC 32 BLW W/TR OIL. FFL 3250'.
- 31.) TIH TO RETRIEVE RBP. SITP 130#. CHECK FL. IFL 600' FS. SWBG. SWBD DRY. RLSE PKR. RIH W/PKR TO CIRC BS OFF RBP. BALLS BRIDGED OFF IN PKR. POH LD 2 3/8" WS. BY-PASS OPENED ON RBP. RIH WITH RET HEAD & TBG. CIRC BS OFF RBP. COULD NOT LATCH ON RBP. POH W/RBP. RIH W/RBP, PKR & TBG. SET RBP @ 3418'. TEST TO 3000#. POH W/PKR & TBG. FRAC PERFS 3259-95 DWN CSG W/21,000 GALS 30# X-LINK GEL, 7000#

- 20/40 SND & 35,000# 12/20 SND. MAX TRTG PRESS 3000#, MIN 2240#, AVG 2300#, AIR 20.5 BPM. ISIP 2100#, 5 MIN 1790#, 10 MIN 1790#, FSIP 15 MIN 1790#.
- 32.) POH W/TBG & TAC. SITP 1800#. OPEN TO TEST TANK. FLWD BACK 375 BLW IN 7 HRS. & DIED. RIH W/RET HEAD & TBG. TAG SND @ 3300'. CIRC SND OFF RBP. LATCH ONTO RBP. RETRIEVE RBP & POH W/TBG. TIH W/2 1/16" MA, TAC, WORKING BBL & TBG. TAC WOULD NOT SET. STARTED OUT OF HOLE W/TBG & TAC.
- 33.) PMPG. PROD 100 BLW IN 14 HRS. SET TAC. NU WH. RIH W/3' X 1 1/2" PLUNGER, 1-5/8" ROD & 123-3/4" RODS. SPACED OUT, HUNG ON BEAM & RD. SET 160 RIG MASTER PMPG UNIT W/85" STROKE. STARTED PMPG @ 5:00 P.M.
- 34.) ON 5-11-87 PMPD 32 BO & 125 BW.