

Authorization for Expenditure

AFE # XX-118998.01

Well Name: HERMAN 3_34-15N-8W 1HX Cost Center Number: 1093525701

Legal Description: SECS 3_34-15N-8W

Revision:

AFE Date:

07-08-2016

State: OK

County/Parish: KINGFISHER

Explanation and Justification:

THE PROPOSED MERAMEC WELL WILL BE A 20,700' MD (10,000 TVD') MISSISSIPPIAN HORIZONTAL WITH APPROXIMATELY 9,600' OF LATERAL.

| Code | Intangible Description | Drilling Costs | Completion Costs | Dry Hole Costs | Total Costs |
|---------|---------------------------|-------------------|---------------------|-------------------|----------------|
| 6010100 | EMPLOYEE SALARIES | 0.00 | 5,000.00 | 0.00 | 5,000.00 |
| | DYED LIQUID FUELS | 69,000.00 | 0.00 | 0.00 | 69,000.00 |
| 6070100 | GENERATORS SVC | 22,000.00 | 0.00 | 0.00 | 22,000.00 |
| | DISPOSAL - SOLIDS | 110,000.00 | 0.00 | 0.00 | 110,000.00 |
| 6080110 | DISP-SALTWATER & OTH | 0.00 | 121,010.00 | 0.00 | 121,010.00 |
| 6090100 | FLUIDS - WATER | 8,000.00 | 43,450.00 | 0.00 | 51,450.00 |
| | PERMIT SURVEY&TITLE | 13,000.00 | 0.00 | 0.00 | 13,000.00 |
| 6100110 | RIGHT OF WAY | 8,000.00 | 0.00 | 0.00 | 8,000.00 |
| 6110120 | ROAD&SITE PREP M&S | 0.00 | 23,183.60 | 0.00 | 23,183.60 |
| 6110130 | ROAD&SITE PREP SVC | 155,000.00 | 0.00 | 0.00 | 155,000.00 |
| 6110170 | DAMAGE & REMEDIATION | 25,000.00 | 0.00 | 0.00 | 25,000.00 |
| 6130170 | COMM SVCS - OTHER | 2,000.00 | 0.00 | 0.00 | 2,000.00 |
| 6130360 | RTOC - ENGINEERING | 22,000.00 | 0.00 | 0.00 | 22,000.00 |
| 6130370 | RTOC - GEOSTEERING | 20,000.00 | 0.00 | 0.00 | 20,000.00 |
| 6140160 | ENV-SERVICES | 0.00 | 10,800.00 | 0.00 | 10,800.00 |
| 6150100 | CH LOG PERFRTG&WL SV | 0.00 | 213,200.00 | 0.00 | 213,200.00 |
| 6160100 | MATERIALS & SUPPLIES | 3,000.00 | 0.00 | 0.00 | 3,000.00 |
| 6170100 | PULLING&SWABBING SVC | 0.00 | 50,400.00 | 0.00 | 50,400.00 |
| 6170110 | SNUBBG&COIL TUBG SVC | 0.00 | 300,000.00 | 0.00 | 300,000.00 |
| 6190100 | TRCKG&HL-SOLID&FLUID | 9,000.00 | 0.00 | 0.00 | 9,000.00 |
| 6190110 | TRUCKING&HAUL OF EQP | 20,000.00 | 21,260.86 | 0.00 | 41,260.86 |
| 6200130 | CONSLT-TECH&PROF SVC | 121,000.00 | 64,750.00 | 0.00 | 185,750.00 |
| 6230120 | SAFETY SERVICES | 20,000.00 | 6,800.00 | 0.00 | 26,800.00 |
| 6300270 | SOLIDS CONTROL SRVCS | 27,000.00 | 0.00 | 0.00 | 27,000.00 |
| 6310120 | STIMULATION SERVICES | 0.00 | 3,261,000.00 | 0.00 | 3,261,000.00 |
| 6310200 | CASING & TUBULAR SVC | 53,000.00 | 0.00 | 0.00 | 53,000.00 |
| 6310250 | CEMENTING SERVICES | 149,000.00 | 0.00 | 0.00 | 149,000.00 |
| 6310270 | CRANE SERVICES | 0.00 | 2,200.00 | 0.00 | 2,200.00 |
| 6310280 | DAYWORK COSTS | 627,000.00 | 0.00 | 0.00 | 627,000.00 |
| 6310300 | DIRECTIONAL SERVICES | 204,000.00 | 0.00 | 0.00 | 204,000.00 |
| 6310310 | DRILL BITS | 94,000.00 | 0.00 | 0.00 | 94,000.00 |
| 6310330 | DRILL&COMP FLUID&SVC | 188,000.00 | 0.00 | 0.00 | 188,000.00 |
| 6310370 | MOB & DEMOBILIZATION | 246,000.00 | 0.00 | 0.00 | 246,000.00 |
| 6310380 | OPEN HOLE EVALUATION | 9,000.00 | 0.00 | 0.00 | 9,000.00 |
| 6310600 | MISC PUMPING SERVICE | 0.00 | 78,600.00 | 0.00 | 78,600.00 |
| | EQPMNT SVC-SRF RNTL | 76,000.00 | 309,290.00 | 0.00 | 385,290.00 |
| 6320110 | EQUIP SVC - DOWNHOLE | 83,000.00 | 53,308.00 | 0.00 | 136,308.00 |
| 6320160 | WELDING SERVICES | 4,000.00 | 0.00 | 0.00 | 4,000.00 |
| 6520100 | LEGAL FEES | 7,500.00 | 0.00 | 0.00 | 7,500.00 |
| 6550110 | MISCELLANEOUS SVC | 19,000.00 | 19,694.00 | 0.00 | 38,694.00 |
| 6550120 | OTHER ROUSTABOUT SER | 0.00 | 40,065.80 | 0.00 | 40,065.80 |
| 6630110 | CAPITAL OVERHEAD | 13,000.00 | 17,500.00 | 0.00 | 30,500.00 |
| 6740340 | TAXES OTHER | 0.00 | 161,760.00 | 0.00 | 161,760.00 |

Costs on this form are estimates only. Working Interest Owners should not consider these estimates as establishing any limit on the monies which will be required to perform the proposed operation.





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AFE # XX-118998.01

Well Name: HERMAN 3_34-15N-8W 1HX Cost Center Number: 1093525701 Legal Description: SECS 3_34-15N-8W

Revision:

AFE Date:

-06-22-2018 7/8/65V

State: County/Parish:

KINGFISHER

| | Total Intangibles | 2,426,500.00 | 4,803,272.26 | 0.00 | 7,229,772.26 |
|---------------|-------------------------|-------------------|---------------------|-------------------|----------------|
| Code | Tangible Description | Drilling Costs | Completion Costs | Dry Hole Costs | Total Costs |
| 6060180 | ELEC & PWRLINE EQUIP | 0.00 | 77,165.00 | 0.00 | 77,165.00 |
| 6120120 | MEASUREMENT EQUIP | 2,000.00 | 22,740.86 | 0.00 | 24,740.86 |
| 6130120 | COMM DEVICES - SCADA | 0.00 | 63,250.00 | 0.00 | 63,250.00 |
| 6300150 | SEPARATOR EQUIPMENT | 0.00 | 50,548.45 | 0.00 | 50,548.45 |
| 6300220 | STORAGE VESSEL&TANKS | 0.00 | 37,159.50 | 0.00 | 37,159.50 |
| 6300230 | PUMPS - SURFACE | 0.00 | 8,781.00 | 0.00 | 8,781.00 |
| 6310150 | CASG-COND&DRIVE PIPE | 17,500.00 | 0.00 | 0.00 | 17,500.00 |
| 6310220 | CORROSION PROTCT EQP | 0.00 | 19,800,00 | 0.00 | 19,800.00 |
| 6310420 | TUBING & COMPONENTS | 0.00 | 63,800,00 | 0.00 | 63,800.00 |
| | WELLHEAD EQUIPMENT | 40,000.00 | 108,500.00 | 0.00 | 148,500.00 |
| 6310490 | WELL TESTING EQUIP | 0.00 | 164,395.00 | 0.00 | 164,395.00 |
| 6310530 | SURFACE CASING | 50,000.00 | 0.00 | 0.00 | 50,000.00 |
| 6310540 | INTERMEDIATE CASING | 279,000.00 | 0.00 | 0.00 | 279.000.00 |
| 6310550 | PRODUCTION CASING | 498,000.00 | 0.00 | 0.00 | 498,000.00 |
| 6310580 | CASING COMPONENTS | 45,000.00 | 0.00 | 0.00 | 45.000.00 |
| 6320130 | PAINT & COATING SERV | 0.00 | 7,150.00 | 0.00 | 7,150.00 |
| 6320180 | EQUIPMENT OTHER | 0.00 | 39,548.30 | 0.00 | 39,548.30 |
| | PIPE,FIT,FLANG,CPLNG | 0.00 | 112,583.64 | 0.00 | 112,583.64 |
| | Total Tangibles | 931,500.00 | 775,421.75 | 0.00 | 1,706,921.75 |
| · | | | | | |
| TC | TAL ESTIMATED COST | 3,358,000.00 | 5,578,694.01 | 0.00 | 8,936,694.01 |

| WORKING INTEREST OWNER APPROVAL | | | | | | |
|---------------------------------|-------------|--|--|--|--|--|
| Company Name: | | | | | | |
| Signature: | Print Name: | | | | | |
| Title: | | | | | | |
| Date: | | | | | | |
| Email: | | | | | | |

Note: Please include/attach well requirement data with ballot.