



Authorization for Expenditure

AFE # XX-127183.01

Well Name: SPUD MUFFIN 31-30 FED COM 732H

Cost Center Number: 1093843501

Legal Description: 31-23S-29E & 30-23S-29E

Revision: ☐

AFE Date: 3/21/2018

State: NM

County/Parish: EDDY

Explanation and Justification:

DRILL & COMPLETE THE SPUD MUFFIN 31-30 FED COM 732H WELL AS A WOLFCAMP (300) LOWER WELL.

Code	Intangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6060100	DYED LIQUID FUELS	67,582.00	0.00	0.00	67,582.00
6080100	DISPOSAL - SOLIDS	104,401.37	1,040.00	0.00	105,441.37
6080110	DISP-SALTWATER & OTH	0.00	184,704.00	0.00	184,704.00
6090100	FLUIDS - WATER	32,550.00	852,508.80	0.00	885,058.80
6100100	PERMIT SURVEY&TITLE	30,000.00	0.00	0.00	30,000.00
6100110	RIGHT OF WAY	25,000.00	0.00	0.00	25,000.00
6110100	ROAD & LOCN RECOVERY	80,000.00	0.00	0.00	80,000.00
6110130	ROAD&SITE PREP SVC	0.00	7,280.00	0.00	7,280.00
6110170	DAMAGE & REMEDIATION	5,000.00	0.00	0.00	5,000.00
6130170	COMM SVCS - WAN	7,522.13	0.00	0.00	7,522.13
6130360	RTOC - ENGINEERING	0.00	10,400.00	0.00	10,400.00
6130370	RTOC - GEOSTEERING	22,957.98	0.00	0.00	22,957.98
6140160	ENV-SERVICES	1,000.00	0.00	0.00	1,000.00
6150100	CH LOG PERFRGTG&WL SV	0.00	403,520.00	0.00	403,520.00
6160100	MATERIALS & SUPPLIES	7,317.91	0.00	0.00	7,317.91
6170110	SNUBBG&COIL TUBG SVC	0.00	353,392.00	0.00	353,392.00
6190100	TRCKG&HL-SOLID&FLUID	102,110.35	0.00	0.00	102,110.35
6190110	TRUCKING&HAUL OF EQP	38,400.00	15,600.00	0.00	54,000.00
6200130	CONSLT & PROJECT SVC	126,225.06	94,882.67	0.00	221,107.73
6230120	SAFETY SERVICES	54,526.93	0.00	0.00	54,526.93
6300270	SOLIDS CONTROL SRVCS	71,477.25	0.00	0.00	71,477.25
6310120	STIMULATION SERVICES	0.00	2,965,546.12	0.00	2,965,546.12
6310200	CASING & TUBULAR SVC	67,100.00	0.00	0.00	67,100.00
6310250	CEMENTING SERVICES	150,000.00	0.00	0.00	150,000.00
6310280	DAYWORK COSTS	617,766.53	0.00	0.00	617,766.53
6310300	DIRECTIONAL SERVICES	300,967.19	0.00	0.00	300,967.19
6310310	DRILL BITS	112,600.00	0.00	0.00	112,600.00
6310330	DRILL&COMP FLUID&SVC	180,615.45	2,080.00	0.00	182,695.45
6310370	MOB & DEMOBILIZATION	194,000.00	0.00	0.00	194,000.00
6310380	OPEN HOLE EVALUATION	124,577.88	0.00	0.00	124,577.88
6310480	TSTNG-WELL, PL & OTH	0.00	58,218.52	0.00	58,218.52
6310600	MISC PUMPING SERVICE	0.00	74,595.78	0.00	74,595.78
6320100	EQPMNT SVC-SRF RNTL	92,406.00	196,514.13	0.00	288,920.13
6320110	EQUIP SVC - DOWNHOLE	67,444.64	0.00	0.00	67,444.64
6320160	WELDING SERVICES	4,700.00	0.00	0.00	4,700.00
6520100	LEGAL FEES	5,000.00	0.00	0.00	5,000.00
6550100	MISCS COSTS & SERVS	0.00	134,360.00	0.00	134,360.00
6550110	MISCELLANEOUS SVC	19,450.00	0.00	0.00	19,450.00
6630110	CAPITAL OVERHEAD	10,211.00	0.00	0.00	10,211.00
	Total Intangibles	2,722,909.67	5,354,642.02	0.00	8,077,551.69

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6310150	CASG-COND&DRIVE PIPE	20,000.00	0.00	0.00	20,000.00

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 operations.

EXHIBIT

4A



Authorization for Expenditure

AFE # XX-127183.01
Well Name: SPUD MUFFIN 31-30 FED COM 732H
Cost Center Number: 1093843501
Legal Description: 31-23S-29E & 30-23S-29E
Revision: ☐

AFE Date: 3/21/2018
State: NM
County/Parish: EDDY

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6310460	WELLHEAD EQUIPMENT	49,600.00	36,400.00	0.00	86,000.00
6310530	SURFACE CASING	31,500.00	0.00	0.00	31,500.00
6310540	INTERMEDIATE CASING	362,343.68	0.00	0.00	362,343.68
6310550	PRODUCTION CASING	466,330.95	0.00	0.00	466,330.95
6310580	CASING COMPONENTS	30,750.00	0.00	0.00	30,750.00
	Total Tangibles	960,524.63	36,400.00	0.00	996,924.63

TOTAL ESTIMATED COST	3,683,434.30	5,391,042.02	0.00	9,074,476.32
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WORKING INTEREST OWNER APPROVAL

Company Name:

Signature:

Print Name:

Title:

Date:

Email:

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

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Authorization for Expenditure

AFE # XX-127185.01

Well Name: SPUD MUFFIN 31-30 COM 734H

Cost Center Number: 1093843701

Legal Description: 31-23S-29E & 30-23S-29E

Revision: ☐

AFE Date: 3/21/2018

State: NM

County/Parish: EDDY

Explanation and Justification:

DRILL & COMPLETE THE SPUD MUFFIN 31-30 COM 734H WELL AS A WOLFCAMP (300) LOWER WELL.

Code	Intangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6060100	DYED LIQUID FUELS	67,582.00	0.00	0.00	67,582.00
6080100	DISPOSAL - SOLIDS	104,401.37	1,040.00	0.00	105,441.37
6080110	DISP-SALTWATER & OTH	0.00	184,704.00	0.00	184,704.00
6090100	FLUIDS - WATER	32,550.00	852,508.80	0.00	885,058.80
6100100	PERMIT SURVEY&TITLE	30,000.00	0.00	0.00	30,000.00
6100110	RIGHT OF WAY	25,000.00	0.00	0.00	25,000.00
6110100	ROAD & LOCN RECOVERY	80,000.00	0.00	0.00	80,000.00
6110130	ROAD&SITE PREP SVC	0.00	7,280.00	0.00	7,280.00
6110170	DAMAGE & REMEDIATION	5,000.00	0.00	0.00	5,000.00
6130170	COMM SVCS - WAN	7,522.13	0.00	0.00	7,522.13
6130360	RTOC - ENGINEERING	0.00	10,400.00	0.00	10,400.00
6130370	RTOC - GEOSTEERING	22,957.98	0.00	0.00	22,957.98
6140160	ENV-SERVICES	1,000.00	0.00	0.00	1,000.00
6150100	CH LOG PERFRGTG&WL SV	0.00	403,520.00	0.00	403,520.00
6160100	MATERIALS & SUPPLIES	7,317.91	0.00	0.00	7,317.91
6170110	SNUBBG&COIL TUBG SVC	0.00	353,392.00	0.00	353,392.00
6190100	TRCKG&HL-SOLID&FLUID	102,110.35	0.00	0.00	102,110.35
6190110	TRUCKING&HAUL OF EQP	38,400.00	15,600.00	0.00	54,000.00
6200130	CONSLT & PROJECT SVC	126,225.06	94,882.67	0.00	221,107.73
6230120	SAFETY SERVICES	54,526.93	0.00	0.00	54,526.93
6300270	SOLIDS CONTROL SRVCS	71,477.25	0.00	0.00	71,477.25
6310120	STIMULATION SERVICES	0.00	2,965,546.12	0.00	2,965,546.12
6310200	CASING & TUBULAR SVC	67,100.00	0.00	0.00	67,100.00
6310250	CEMENTING SERVICES	150,000.00	0.00	0.00	150,000.00
6310280	DAYWORK COSTS	617,766.53	0.00	0.00	617,766.53
6310300	DIRECTIONAL SERVICES	300,967.19	0.00	0.00	300,967.19
6310310	DRILL BITS	112,600.00	0.00	0.00	112,600.00
6310330	DRILL&COMP FLUID&SVC	180,615.45	2,080.00	0.00	182,695.45
6310370	MOB & DEMOBILIZATION	194,000.00	0.00	0.00	194,000.00
6310380	OPEN HOLE EVALUATION	124,577.88	0.00	0.00	124,577.88
6310480	TSTNG-WELL, PL & OTH	0.00	58,218.52	0.00	58,218.52
6310600	MISC PUMPING SERVICE	0.00	74,595.78	0.00	74,595.78
6320100	EQPMNT SVC-SRF RNTL	92,406.00	196,514.13	0.00	288,920.13
6320110	EQUIP SVC - DOWNHOLE	67,444.64	0.00	0.00	67,444.64
6320160	WELDING SERVICES	4,700.00	0.00	0.00	4,700.00
6520100	LEGAL FEES	5,000.00	0.00	0.00	5,000.00
6550100	MISCS COSTS & SERVS	0.00	134,360.00	0.00	134,360.00
6550110	MISCELLANEOUS SVC	19,450.00	0.00	0.00	19,450.00
6630110	CAPITAL OVERHEAD	10,211.00	0.00	0.00	10,211.00
	Total Intangibles	2,722,909.67	5,354,642.02	0.00	8,077,551.69

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6310150	CASG-COND&DRIVE PIPE	20,000.00	0.00	0.00	20,000.00

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.



Authorization for Expenditure

AFE # XX-127185.01

Well Name: SPUD MUFFIN 31-30 COM 734H

Cost Center Number: 1093843701

Legal Description: 31-23S-29E & 30-23S-29E

Revision: ☐

AFE Date: 3/21/2018

State: NM

County/Parish: EDDY

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6310460	WELLHEAD EQUIPMENT	49,600.00	36,400.00	0.00	86,000.00
6310530	SURFACE CASING	31,500.00	0.00	0.00	31,500.00
6310540	INTERMEDIATE CASING	362,343.68	0.00	0.00	362,343.68
6310550	PRODUCTION CASING	466,330.95	0.00	0.00	466,330.95
6310580	CASING COMPONENTS	30,750.00	0.00	0.00	30,750.00
	Total Tangibles	960,524.63	36,400.00	0.00	996,924.63

TOTAL ESTIMATED COST	3,683,434.30	5,391,042.02	0.00	9,074,476.32
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WORKING INTEREST OWNER APPROVAL

Company Name:

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Authorization for Expenditure

AFE # XX-127183.01

Well Name: SPUD MUFFIN 31-30 FED COM 732H

Cost Center Number: 1093843501

Legal Description: 31-23S-29E & 30-23S-29E

Revision: ☐

AFE Date: 4/24/2018

State: NM

County/Parish: EDDY

Explanation and Justification:

DRILL & COMPLETE THE SPUD MUFFIN 31-30 FED COM 732H WELL AS A WOLFCAMP (300) LOWER WELL.

Code	Intangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6060100	DYED LIQUID FUELS	67,582.00	0.00	0.00	67,582.00
6080100	DISPOSAL - SOLIDS	104,401.37	1,040.00	0.00	105,441.37
6080110	DISP-SALTWATER & OTH	0.00	184,704.00	0.00	184,704.00
6090100	FLUIDS - WATER	32,550.00	852,508.80	0.00	885,058.80
6100100	PERMIT SURVEY&TITLE	30,000.00	0.00	0.00	30,000.00
6100110	RIGHT OF WAY	25,000.00	0.00	0.00	25,000.00
6110100	ROAD & LOCN RECOVERY	80,000.00	0.00	0.00	80,000.00
6110130	ROAD&SITE PREP SVC	0.00	7,280.00	0.00	7,280.00
6110170	DAMAGE & REMEDIATION	5,000.00	0.00	0.00	5,000.00
6130170	COMM SVCS - WAN	7,522.13	0.00	0.00	7,522.13
6130360	RTOC - ENGINEERING	0.00	10,400.00	0.00	10,400.00
6130370	RTOC - GEOSTEERING	22,957.98	0.00	0.00	22,957.98
6140160	ENV-SERVICES	1,000.00	0.00	0.00	1,000.00
6150100	CH LOG PERFRTG&WL SV	0.00	403,520.00	0.00	403,520.00
6160100	MATERIALS & SUPPLIES	7,317.91	0.00	0.00	7,317.91
6170110	SNUBBG&COIL TUBG SVC	0.00	353,392.00	0.00	353,392.00
6190100	TRCKG&HL-SOLID&FLUID	102,110.35	0.00	0.00	102,110.35
6190110	TRUCKING&HAUL OF EQP	38,400.00	15,600.00	0.00	54,000.00
6200130	CONSLT & PROJECT SVC	126,225.06	94,882.67	0.00	221,107.73
6230120	SAFETY SERVICES	54,526.93	0.00	0.00	54,526.93
6300270	SOLIDS CONTROL SRVCS	71,477.25	0.00	0.00	71,477.25
6310120	STIMULATION SERVICES	0.00	2,965,546.12	0.00	2,965,546.12
6310200	CASING & TUBULAR SVC	67,100.00	0.00	0.00	67,100.00
6310250	CEMENTING SERVICES	150,000.00	0.00	0.00	150,000.00
6310280	DAYWORK COSTS	617,766.53	0.00	0.00	617,766.53
6310300	DIRECTIONAL SERVICES	300,967.19	0.00	0.00	300,967.19
6310310	DRILL BITS	112,600.00	0.00	0.00	112,600.00
6310330	DRILL&COMP FLUID&SVC	180,615.45	2,080.00	0.00	182,695.45
6310370	MOB & DEMOBILIZATION	194,000.00	0.00	0.00	194,000.00
6310380	OPEN HOLE EVALUATION	124,577.88	0.00	0.00	124,577.88
6310480	TESTNG-WELL, PL & OTH	0.00	58,218.52	0.00	58,218.52
6310600	MISC PUMPING SERVICE	0.00	74,595.78	0.00	74,595.78
6320100	EQPMNT SVC-SRF RNTL	92,406.00	196,514.13	0.00	288,920.13
6320110	EQUIP SVC - DOWNHOLE	67,444.64	0.00	0.00	67,444.64
6320160	WELDING SERVICES	4,700.00	0.00	0.00	4,700.00
6520100	LEGAL FEES	5,000.00	0.00	0.00	5,000.00
6550100	MISCS COSTS & SERVS	0.00	134,360.00	0.00	134,360.00
6550110	MISCELLANEOUS SVC	19,450.00	0.00	0.00	19,450.00
6630110	CAPITAL OVERHEAD	10,211.00	0.00	0.00	10,211.00
	Total Intangibles	2,722,909.67	5,354,642.02	0.00	8,077,551.69

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6310150	CASG-COND&DRIVE PIPE	20,000.00	0.00	0.00	20,000.00

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Authorization for Expenditure

AFE # XX-127183.01

Well Name: SPUD MUFFIN 31-30 FED COM 732H

Cost Center Number: 1093843501

Legal Description: 31-23S-29E & 30-23S-29E

Revision: ☐

AFE Date: 4/24/2018

State: NM

County/Parish: EDDY

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6310460	WELLHEAD EQUIPMENT	49,600.00	36,400.00	0.00	86,000.00
6310530	SURFACE CASING	31,500.00	0.00	0.00	31,500.00
6310540	INTERMEDIATE CASING	362,343.68	0.00	0.00	362,343.68
6310550	PRODUCTION CASING	466,330.95	0.00	0.00	466,330.95
6310580	CASING COMPONENTS	30,750.00	0.00	0.00	30,750.00
6320180	EQUIPMENT OTHER	0.00	950,000.00	0.00	950,000.00
	Total Tangibles	960,524.63	986,400.00	0.00	1,946,924.63

TOTAL ESTIMATED COST	3,683,434.30	6,341,042.02	0.00	10,024,476.32
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WORKING INTEREST OWNER APPROVAL

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Authorization for Expenditure

AFE # XX-127185.01

Well Name: SPUD MUFFIN 31-30 COM 734H

Cost Center Number: 1093843701

Legal Description: 31-23S-29E & 30-23S-29E

Revision: ☐

AFE Date: 4/24/2018

State: NM

County/Parish: EDDY

Explanation and Justification:

DRILL & COMPLETE THE SPUD MUFFIN 31-30 COM 734H WELL AS A WOLFCAMP (300) LOWER WELL.

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6170110	SNUBBG&COIL TUBG SVC	0.00	353,392.00	0.00	353,392.00
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6310200	CASING & TUBULAR SVC	67,100.00	0.00	0.00	67,100.00
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6310280	DAYWORK COSTS	617,766.53	0.00	0.00	617,766.53
6310300	DIRECTIONAL SERVICES	300,967.19	0.00	0.00	300,967.19
6310310	DRILL BITS	112,600.00	0.00	0.00	112,600.00
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6310480	TSTNG-WELL, PL & OTH	0.00	58,218.52	0.00	58,218.52
6310600	MISC PUMPING SERVICE	0.00	74,595.78	0.00	74,595.78
6320100	EQPMNT SVC-SRF RNTL	92,406.00	196,514.13	0.00	288,920.13
6320110	EQUIP SVC - DOWNHOLE	67,444.64	0.00	0.00	67,444.64
6320160	WELDING SERVICES	4,700.00	0.00	0.00	4,700.00
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6550100	MISCS COSTS & SERVS	0.00	134,360.00	0.00	134,360.00
6550110	MISCELLANEOUS SVC	19,450.00	0.00	0.00	19,450.00
6630110	CAPITAL OVERHEAD	10,211.00	0.00	0.00	10,211.00
	Total Intangibles	2,722,909.67	5,354,642.02	0.00	8,077,551.69

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
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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.



Authorization for Expenditure

AFE # XX-127185.01

Well Name: SPUD MUFFIN 31-30 COM 734H

Cost Center Number: 1093843701

Legal Description: 31-23S-29E & 30-23S-29E

Revision: ☐

AFE Date: 4/24/2018

State: NM

County/Parish: EDDY

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6310460	WELLHEAD EQUIPMENT	49,600.00	36,400.00	0.00	86,000.00
6310530	SURFACE CASING	31,500.00	0.00	0.00	31,500.00
6310540	INTERMEDIATE CASING	362,343.68	0.00	0.00	362,343.68
6310550	PRODUCTION CASING	466,330.95	0.00	0.00	466,330.95
6310580	CASING COMPONENTS	30,750.00	0.00	0.00	30,750.00
6320180	EQUIPMENT OTHER	0.00	950,000.00	0.00	950,000.00
	Total Tangibles	960,524.63	986,400.00	0.00	1,946,924.63

TOTAL ESTIMATED COST	3,683,434.30	6,341,042.02	0.00	10,024,476.32
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WORKING INTEREST OWNER APPROVAL

Company Name:

Signature:

Print Name:

Title:

Date:

Email:

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

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.



Authorization for Expenditure

AFE # XX-129474.01

Well Name: SPUD MUFFIN 31-30 FED COM 621H

Cost Center Number: 1093927501

Legal Description: SEC 31-23S-29E & 30-23S-29E

Revision: ☐

AFE Date: 5/24/2018

State: NM

County/Parish: EDDY

Explanation and Justification:

DRILL & COMPLETE THE SPUD MUFFIN 31-30 FED COM 621H AS A WOLFCAMP XY WELL.

Code	Intangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6060100	DYED LIQUID FUELS	102,375.00	0.00	0.00	102,375.00
6060130	GASEOUS FUELS	35,700.00	0.00	0.00	35,700.00
6080100	DISPOSAL - SOLIDS	51,230.00	1,050.00	0.00	52,280.00
6080110	DISP-SALTWATER & OTH	0.00	305,550.00	0.00	305,550.00
6090100	FLUIDS - WATER	48,675.00	647,036.67	0.00	695,711.67
6100100	PERMIT SURVEY&TITLE	30,000.00	0.00	0.00	30,000.00
6100110	RIGHT OF WAY	25,000.00	0.00	0.00	25,000.00
6110100	ROAD & LOCN RECOVERY	80,000.00	0.00	0.00	80,000.00
6110130	ROAD&SITE PREP SVC	0.00	12,600.00	0.00	12,600.00
6110170	DAMAGE & REMEDIATION	5,000.00	0.00	0.00	5,000.00
6130170	COMM SVCS - WAN	5,206.00	0.00	0.00	5,206.00
6130360	RTOC - ENGINEERING	0.00	10,500.00	0.00	10,500.00
6130370	RTOC - GEOSTEERING	31,560.00	0.00	0.00	31,560.00
6140160	ENV-SERVICES	1,000.00	0.00	0.00	1,000.00
6150100	CH LOG PERFRTG&WL SV	0.00	380,572.50	0.00	380,572.50
6160100	MATERIALS & SUPPLIES	595.00	0.00	0.00	595.00
6170110	SNUBBG&COIL TUBG SVC	0.00	350,127.22	0.00	350,127.22
6190100	TRCKG&HL-SOLID&FLUID	87,750.00	0.00	0.00	87,750.00
6190110	TRUCKING&HAUL OF EQP	62,400.00	15,750.00	0.00	78,150.00
6200130	CONSLT & PROJECT SVC	114,625.00	116,768.46	0.00	231,393.46
6230120	SAFETY SERVICES	49,088.00	0.00	0.00	49,088.00
6300270	SOLIDS CONTROL SRVCS	117,000.00	0.00	0.00	117,000.00
6310120	STIMULATION SERVICES	0.00	2,701,254.47	0.00	2,701,254.47
6310200	CASING & TUBULAR SVC	79,400.00	0.00	0.00	79,400.00
6310250	CEMENTING SERVICES	157,000.00	0.00	0.00	157,000.00
6310280	DAYWORK COSTS	619,455.00	0.00	0.00	619,455.00
6310300	DIRECTIONAL SERVICES	379,000.00	0.00	0.00	379,000.00
6310310	DRILL BITS	94,100.00	0.00	0.00	94,100.00
6310330	DRILL&COMP FLUID&SVC	219,000.00	2,100.00	0.00	221,100.00
6310380	OPEN HOLE EVALUATION	27,250.00	0.00	0.00	27,250.00
6310480	TSING-WELL, PL & OTH	0.00	178,929.60	0.00	178,929.60
6310600	MISC PUMPING SERVICE	0.00	81,331.16	0.00	81,331.16
6320100	EQPMNT SVC-SRF RNTL	65,037.00	271,820.02	0.00	336,857.02
6320110	EQUIP SVC - DOWNHOLE	208,200.00	0.00	0.00	208,200.00
6320160	WELDING SERVICES	2,000.00	0.00	0.00	2,000.00
6520100	LEGAL FEES	5,000.00	0.00	0.00	5,000.00
6550100	MISCS COSTS & SERVS	0.00	950,000.00	0.00	950,000.00
6550110	MISCELLANEOUS SVC	33,650.00	0.00	0.00	33,650.00
6630110	CAPITAL OVERHEAD	8,925.00	0.00	0.00	8,925.00
6740340	TAXES OTHER	297.00	0.00	0.00	297.00
	Total Intangibles	2,745,518.00	6,025,390.10	0.00	8,770,908.10

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs

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.



Authorization for Expenditure

AFE # XX-129474.01

Well Name: SPUD MUFFIN 31-30 FED COM 621H

Cost Center Number: 1093927501

Legal Description: SEC 31-23S-29E & 30-23S-29E

Revision: ☐

AFE Date: 5/24/2018

State: NM

County/Parish: EDDY

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6310150	CASG-COND&DRIVE PIPE	20,000.00	0.00	0.00	20,000.00
6310460	WELLHEAD EQUIPMENT	65,000.00	36,750.00	0.00	101,750.00
6310530	SURFACE CASING	22,638.00	0.00	0.00	22,638.00
6310540	INTERMEDIATE CASING	350,799.00	0.00	0.00	350,799.00
6310550	PRODUCTION CASING	407,400.00	0.00	0.00	407,400.00
6310580	CASING COMPONENTS	50,500.00	0.00	0.00	50,500.00
	Total Tangibles	916,337.00	36,750.00	0.00	953,087.00

TOTAL ESTIMATED COST	3,661,855.00	6,062,140.10	0.00	9,723,995.10
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WORKING INTEREST OWNER APPROVAL

Company Name:

Signature:

Print Name:

Title:

Date:

Email:

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

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.



Authorization for Expenditure

AFE # XX-129485.01

Well Name: SPUD MUFFIN 31-30 COM 622H

Cost Center Number: 1093927601

Legal Description: SEC 31-23S-29E & 30-23S-29E

Revision: ☐

AFE Date: 5/24/2018

State: NM

County/Parish: EDDY

Explanation and Justification:

DRILL & COMPLETE THE SPUD MUFFIN 31-30 COM 622H AS A WOLFCAMP XY WELL.

Code	Intangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6060100	DYED LIQUID FUELS	102,375.00	0.00	0.00	102,375.00
6060130	GASEOUS FUELS	35,700.00	0.00	0.00	35,700.00
6080100	DISPOSAL - SOLIDS	51,230.00	1,050.00	0.00	52,280.00
6080110	DISP-SALTWATER & OTH	0.00	305,550.00	0.00	305,550.00
6090100	FLUIDS - WATER	48,675.00	647,036.67	0.00	695,711.67
6100100	PERMIT SURVEY&TITLE	30,000.00	0.00	0.00	30,000.00
6100110	RIGHT OF WAY	25,000.00	0.00	0.00	25,000.00
6110100	ROAD & LOCN RECOVERY	80,000.00	0.00	0.00	80,000.00
6110130	ROAD&SITE PREP SVC	0.00	12,600.00	0.00	12,600.00
6110170	DAMAGE & REMEDIATION	5,000.00	0.00	0.00	5,000.00
6130170	COMM SVCS - WAN	5,206.00	0.00	0.00	5,206.00
6130360	RTOC - ENGINEERING	0.00	10,500.00	0.00	10,500.00
6130370	RTOC - GEOSTEERING	31,560.00	0.00	0.00	31,560.00
6140160	ENV-SERVICES	1,000.00	0.00	0.00	1,000.00
6150100	CH LOG PERFRTG&WL SV	0.00	380,572.50	0.00	380,572.50
6160100	MATERIALS & SUPPLIES	595.00	0.00	0.00	595.00
6170110	SNUBBG&COIL TUBG SVC	0.00	350,127.22	0.00	350,127.22
6190100	TRCKG&HL-SOLID&FLUID	87,750.00	0.00	0.00	87,750.00
6190110	TRUCKING&HAUL OF EQP	62,400.00	15,750.00	0.00	78,150.00
6200130	CONSLT & PROJECT SVC	114,625.00	116,768.46	0.00	231,393.46
6230120	SAFETY SERVICES	49,088.00	0.00	0.00	49,088.00
6300270	SOLIDS CONTROL SRVCS	117,000.00	0.00	0.00	117,000.00
6310120	STIMULATION SERVICES	0.00	2,701,254.47	0.00	2,701,254.47
6310200	CASING & TUBULAR SVC	79,400.00	0.00	0.00	79,400.00
6310250	CEMENTING SERVICES	157,000.00	0.00	0.00	157,000.00
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6310300	DIRECTIONAL SERVICES	379,000.00	0.00	0.00	379,000.00
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6310330	DRILL&COMP FLUID&SVC	219,000.00	2,100.00	0.00	221,100.00
6310380	OPEN HOLE EVALUATION	27,250.00	0.00	0.00	27,250.00
6310480	TESTNG-WELL, PL & OTH	0.00	178,929.60	0.00	178,929.60
6310600	MISC PUMPING SERVICE	0.00	81,331.16	0.00	81,331.16
6320100	EQPMNT SVC-SRF RNTL	65,037.00	271,820.02	0.00	336,857.02
6320110	EQUIP SVC - DOWNHOLE	208,200.00	0.00	0.00	208,200.00
6320160	WELDING SERVICES	2,000.00	0.00	0.00	2,000.00
6520100	LEGAL FEES	5,000.00	0.00	0.00	5,000.00
6550100	MISCS COSTS & SERVS	0.00	950,000.00	0.00	950,000.00
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6630110	CAPITAL OVERHEAD	8,925.00	0.00	0.00	8,925.00
6740340	TAXES OTHER	297.00	0.00	0.00	297.00
	Total Intangibles	2,745,518.00	6,025,390.10	0.00	8,770,908.10

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs

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Authorization for Expenditure

AFE # XX-129485.01

Well Name: SPUD MUFFIN 31-30 COM 622H

Cost Center Number: 1093927601

Legal Description: SEC 31-23S-29E & 30-23S-29E

Revision: ☐

AFE Date: 5/24/2018

State: NM

County/Parish: EDDY

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6310150	CASG-COND&DRIVE PIPE	20,000.00	0.00	0.00	20,000.00
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6310530	SURFACE CASING	22,638.00	0.00	0.00	22,638.00
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6310580	CASING COMPONENTS	50,500.00	0.00	0.00	50,500.00
	Total Tangibles	916,337.00	36,750.00	0.00	953,087.00

TOTAL ESTIMATED COST	3,661,855.00	6,062,140.10	0.00	9,723,995.10
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WORKING INTEREST OWNER APPROVAL

Company Name:

Signature:

Print Name:

Title:

Date:

Email:

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