### EDGE PETROLEUM OPERATING COMPANY, INC. 1301 TRAVIS STREET, SUITE 2000, HOUSTON, TX, 77002 Tel: (713) 654-8960, Fax: (713) 654-7722

## **AUTHORIZATION - FOR - EXPENDITURE**

Location:	Lea County, NM			 	Field/Prospect: South Lusk Objective: Atoka, Morrow Proposed TD: 12,800' AFE No: 25DR006			Date: 6/15/2005
X	= 6/1,241	- Y≍;	591,793	_	AFE No	25DR006		
(Circle one	9)	LLING-EXPL		LLING-DE	-	RECOMPLETION	WO-EXPENSE	OTHER INVEST
Project Des	всприон:	Art. scope i	s to ann and	complete a	a 12,800' MD Atol	ca, Morrow vveil.		
INTANGIBL	FOOSTO							
	ey/Damages/Lega	31				DRILLING 15,500	COMPLETION	TOTAL 15,500
	Road: Bldg./Resto					35,000	15,000	50,000
MI/RU/RD	. <u>.</u> .					70,000		70,000
Con. DrillD	urnkey, Footage,	Other	45	_ to	14 500	652 500	32,000	674 500
Completion	-		15	_days@.\$ _days@.\$		652,500	22,000 52,500	674,500 52,500
	s & Equipment				0,000	75,000	15,000	90,000
Bits						77,000	2,000	79,000
Mud & Cher						60,000		60,000
Fuel, Power				· · · · · ·		74,000	2,000	76,000
Contract Su	•		55	days @ \$	800	44,000	16,000	60,000
Transportati Mud Loggin			38	days @ \$	750	5,000 28,500	10,000	15,000 28,500
Electric Log				2013 60 1	, , , , , , , , , , , , , , , , , , , ,	35,000		35,000
1	ement Services					80,000	20,000	100,000
Perforating/				_			24,000	24,000
1	d Tubing Units			_days @ \$	·			
	ection and testing					6,500	2,500	9,000
	Coring & Analysis aid Stimulation					8,000	135,000	8,000 135,000
	w, Tongs & Tools					20,000	15,000	35,000
	ucking, Contract L	abor				25,000	18,000	43,000
Fishing Serv	vices							-
Consulting S							2,500	2,500
	lime, Exp. & Bene	efits)		·····		11.000	7.000	24.000
Overhead						14,000	7,000	21,000 10,000
Other		1	Subtotal In	tongible		5,000 1,330,000	5,000 363,500	1,693,500
		Castingania			) %	133,000	36,350	169,350
		r-ommoence						
	,	Contingencie TOTAL II	VTANGIBLE			1,463,000	399,850	1,862,850
							399,850	
TANGIBLE			VTANGIBLI	COSTS		1,463,000 DRILLING		TOTAL
Conductor P	Pipe		Size	Footage	\$/foot	1,463,000 DRILLING 8,500	399,850	TOTAL 8,500
Conductor P Surf. Casing	Pipe J		Size 20"	Footage 800	47.00	1,463,000  DRILLING 8,500 37,600	399,850	TOTAL 8,500 37,600
Conductor P Surf. Casing Intermediate	Pipe J Csg		Size 20" 13 3/8"	Footage 800 2600	47.00 35.00	1,463,000  DRILLING 8,500 37,600 91,000	399,850	TOTAL 8,500 37,600 91,000
Conductor P Surf. Casing	Pipe J Csg		Size 20"	Footage 800	47.00	1,463,000  DRILLING 8,500 37,600	399,850	TOTAL 8,500 37,600
Conductor P Surf. Casing Intermediate Intermediate	Pipe J Csg		Size 20" 13 3/8" 9 5/8"	Footage 800 2600 4500	47.00 35.00 32.00	1,463,000  DRILLING 8,500 37,600 91,000	399,850 COMPLETION	8,500 37,600 91,000 144,000
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip.	Pipe 3 2 Csg 3 Csg 4 Liner Hanger		Size 20" 13 3/8" 9 5/8" 5 1/2"	Footage 800 2600 4500 12800	47.00 35.00 32.00 21.00	1,463,000  DRILLING 8,500 37,600 91,000	268,800 69,300 3,000	8,500 37,600 91,000 144,000 268,800 69,300 13,000
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt	Pipe  Csg Csg Csg Liner Hanger	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"	Footage 800 2600 4500 12800 12,600	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING 8,500 37,600 91,000 144,000	268,800 69,300 10,000	8,500 37,600 91,000 144,000 268,800 69,300 13,000
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ed	ipe ) 9 Csg 9 Csg & Liner Hanger tings quipment	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"	Footage 800 2600 4500 12800 12,600	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING 8,500 37,600 91,000 144,000	268,800 69,300 10,000 16,000	8,500 37,600 91,000 144,000 268,800 69,300 13,000 10,000 34,000
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Do	Pipe  Cosg Cosg  Liner Hanger tings quipment ownhole Equipmer	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"	Footage 800 2600 4500 12800 12,600	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING 8,500 37,600 91,000 144,000	268,800 69,300 3,000 10,000 16,000 9,000	8,500 37,600 91,000 144,000 268,800 69,300 13,000 10,000 34,000 9,000
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Do	Pipe  C Csg  Liner Hanger tings cyulpment tywnhole Equipmer eater-Treater	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"	Footage 800 2600 4500 12800 12,600	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING 8,500 37,600 91,000 144,000	268,800 69,300 10,000 16,000	8,500 37,600 91,000 144,000 268,800 69,300 13,000 10,000 34,000
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Do Separator/Hi Rods & Pum	Pipe  C Csg  Liner Hanger tings cyulpment tywnhole Equipmer eater-Treater	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"	Footage 800 2600 4500 12800 12,600	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING 8,500 37,600 91,000 144,000	268,800 69,300 3,000 10,000 16,000 9,000	TOTAL  8,500  37,600  91,000  144,000  268,800  69,300  10,000  34,000  9,000  25,000
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Do Separator/Hi Rods & Pum	Pipe  CSg  CSg  Liner Hanger tings quipment winhole Equipmer eater-Treater ip it & Prime Mover	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"	Footage 800 2600 4500 12800 12,600	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING 8,500 37,600 91,000 144,000	268,800 69,300 3,000 10,000 16,000 9,000	8,500 37,600 91,000 144,000 268,800 69,300 13,000 10,000 34,000 9,000
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Do Separator/Hi Rods & Pum Pumping Un Dehyd./Com Tanks	Pipe  Cosg  Cosg  Liner Hanger tings quipment punhole Equipmer eater-Treater it ppressor	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"	Footage 800 2600 4500 12800 12,600	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING 8,500 37,600 91,000 144,000	268,800 69,300 3,000 10,000 9,000 25,000	TOTAL  8,500  37,600  91,000  144,000  268,800  69,300  10,000  34,000  9,000  25,000  25,000
Conductor P Surf. Casing Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ed Packer & Do Separator/Hi Rods & Pum Pumping Un Dehyd./Com Tanks Meter & Met	Pipe  C Csg  & Liner Hanger tings  quipment pwnhole Equipmer eater-Treater pr if & Prime Mover apressor er Run	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"	Footage 800 2600 4500 12800 12,600	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING 8,500 37,600 91,000 144,000	268,800 69,300 3,000 10,000 16,000 9,000 25,000 25,000 8,500	8,500 37,600 91,000 144,000 268,800 69,300 13,000 10,000 34,000 9,000
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Do Separator/Hi Rods & Pum Pumping Un Dehyd /Com Tanks Meter & Met Flowlines & 6	Pipe CSg	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"	Footage 800 2600 4500 12800 12,600	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING 8,500 37,600 91,000 144,000	268,800 69,300 3,000 10,000 9,000 25,000	TOTAL  8,500  37,600  91,000  144,000  268,800  69,300  10,000  34,000  9,000  25,000  25,000
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Do Separator/Hi Rods & Pum Pumping Un Dehyd /Com Tanks Meter & Mett Flowlines & Met Pipeline/RON	Pipe  Cosg  Cosg  Liner Hanger  tings  quipment  bownhole Equipmer  eater-Treater  ip  it & Prime Mover  pressor  er Run  Connectors  W & Sales Conne	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"	Footage 800 2600 4500 12800 12,600	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING 8,500 37,600 91,000 144,000	399,850  COMPLETION  268,800 69,300 3,000 10,000 16,000 9,000 25,000  25,000 8,500 25,000	8,500 37,600 91,000 144,000 268,800 69,300 13,000 10,000 34,000 9,000 25,000 25,000 8,500
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Do Separator/Hi Rods & Pum Pumping Un Dehyd./Com Tanks Meter & Mett Flowlines & G Pipeline/ROV Installation C	Pipe  Cosg  Cosg  Liner Hanger  tings  quipment  pwnhole Equipmer  eater-Treater  pp  if & Prime Mover  pressor  er Run  Connectors  W & Sales Connectors	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"	Footage 800 2600 4500 12800 12,600	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING 8,500 37,600 91,000 144,000	268,800 69,300 3,000 10,000 16,000 9,000 25,000 25,000 8,500	TOTAL  8,500  37,600  91,000  144,000  268,800  69,300  10,000  34,000  9,000  25,000  25,000
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Do Separator/H-I Rods & Pum Pumping Un Dehyd./Com Tanks Meter & Mete Flowlines & C Pipeline/RO\ Installation C Misc. Equipn	Pipe  Cosg  Cosg  Liner Hanger  tings  quipment  pwnhole Equipmer  eater-Treater  pp  if & Prime Mover  pressor  er Run  Connectors  W & Sales Connectors	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8" CONS	Footage 800 2600 4500 12800 12,600 ERVATI	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING 8,500 37,600 91,000 144,000  10,000	268,800 69,300 3,000 10,000 16,000 25,000 25,000 25,000 15,000	8,500 37,600 91,000 144,000 268,800 69,300 13,000 10,000 34,000 9,000 25,000 25,000 8,500
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Del Separator/Hel Rods & Pum Pumping Un Dehyd./Com Tanks Meter & Mete Flowlines & O Installation C Misc. Equipn	Pipe  Cosg  Cosg  Liner Hanger  tings  quipment  pwnhole Equipmer  eater-Treater  pp  if & Prime Mover  pressor  er Run  Connectors  W & Sales Connectors	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"  CONS  SE NUM  XH181T	Footage 800 2600 4500 12800 12,600	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING 8,500 37,600 91,000 144,000  10,000  IN 18,000	399,850  COMPLETION  268,800 69,300 3,000 10,000 16,000 9,000 25,000 25,000 3,500 25,000 15,000 474,600	TOTAL  8,500  37,600  91,000  144,000  268,800  69,300  13,000  10,000  34,000  9,000  25,000  25,000  8,500  15,000  783,700
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Do Separator/H-I Rods & Pum Pumping Un Dehyd./Com Tanks Meter & Mete Flowlines & C Pipeline/RO\ Installation C Misc. Equipn	Pipe  Cosg  Cosg  Liner Hanger  tings  quipment  pwnhole Equipmer  eater-Treater  pp  if & Prime Mover  pressor  er Run  Connectors  W & Sales Connectors	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"  CONS	Footage 800 2600 4500 12800 12,600 MBER NUMBE	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING	268,800 69,300 3,000 10,000 16,000 9,000 25,000 3,500 25,000 15,000 474,600 23,730	TOTAL  8,500 37,600 91,000 144,000 268,800 69,300 13,000 10,000 34,000 9,000 25,000 25,000 8,500 - 15,000 783,700 39,185
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Del Separator/Hel Rods & Pum Pumping Un Dehyd./Com Tanks Meter & Mete Flowlines & O Installation C Misc. Equipn	Pipe  Cosg  Cosg  Liner Hanger  tings  quipment  pwnhole Equipmer  eater-Treater  pp  if & Prime Mover  pressor  er Run  Connectors  W & Sales Connectors	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"  CONS  SE NUM  XH181T	Footage 800 2600 4500 12800 12,600 MBER NUMBE	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING 8,500 37,600 91,000 144,000  10,000  IN 18,000	399,850  COMPLETION  268,800 69,300 3,000 10,000 16,000 9,000 25,000 25,000 3,500 25,000 15,000 474,600	TOTAL  8,500  37,600  91,000  144,000  268,800  69,300  13,000  10,000  34,000  9,000  25,000  25,000  8,500  15,000  783,700
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Do Separator/H-I Rods & Pum Pumping Un Dehyd./Com Tanks Meter & Mete Flowlines & C Pipeline/RO\ Installation C Misc. Equipn	Pipe  Cosg  Cosg  Liner Hanger  tings  quipment  pwnhole Equipmer  eater-Treater  pp  if & Prime Mover  pressor  er Run  Connectors  W & Sales Connectors	TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"  CONSI	Footage 800 2600 4500 12800 12,600  ERVATI ABER NUMBE	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING	268,800 69,300 3,000 10,000 16,000 9,000 25,000 3,500 25,000 15,000 474,600 23,730	TOTAL  8,500 37,600 91,000 144,000 268,800 69,300 13,000 10,000 34,000 9,000 25,000 25,000 8,500 - 15,000 783,700 39,185
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Separator/Hi Rods & Pum Pumping Un Dehyd./Com Tanks Meter & Meter Flowlines & 0 Pipeline/RO\ Installation C Misc. Equipn Other	& Liner Hanger tings  & Liner Hanger tings quipment ownhole Equipmer eater-Treater ip iit & Prime Mover ipressor er Run Connectors W & Sales Connectors W & Sales Connectors TOTAL TANC	TOTAL IN  CA  Contingencie  TOTAL TO  GIBLE & INTA  Edge WI (%)	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"  CONSI	Footage 800 2600 4500 12800 12,600  ERVATI ABER NUMBE	47.00 35.00 32.00 21.00 5.50	1,463,000  DRILLING	268,800 69,300 3,000 10,000 9,000 25,000 25,000 25,000 15,000 474,600 23,730 498,330	TOTAL  8,500 37,600 91,000 144,000 268,800 69,300 13,000 10,000 34,000 9,000 25,000 25,000 8,500 15,000 783,700 39,185 822,885
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Do Separator/Hi Rods & Pum Pumping Un Dehyd./Com Tanks Meter & Meter Flowlines & 0 Pipeline/RO Installation C Misc. Equipn Other  EDGE APPR Prepared by:	A Cosg  a Coss  a Connectors	Contingencie TOTAL IN	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"  CONSI	Footage 800 2600 4500 12800 12,600  ERVATI ABER NUMBE	47.00 35.00 32.00 21.00 5.50  NONOPERATOR Company:	1,463,000  DRILLING	268,800 69,300 3,000 10,000 16,000 9,000 25,000 25,000 3,500 25,000 15,000 474,600 23,730 498,330	TOTAL  8,500 37,600 91,000 144,000 268,800 69,300 13,000 10,000 34,000 9,000 25,000 25,000 8,500 15,000 783,700 39,185 822,885
Conductor P Surf. Casing Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Do Separator/Hi Rods & Pumping Un Dehyd /Com Tanks Meter & Meter Flowlines & (P Pipeline/RO) Installation O ther  EDGE APPR Prepared by: Date:	A Cosg  a Coss  a Coss	TOTAL IN  CA  Contingencie  TOTAL TO  GIBLE & INTA  Edge WI (%)	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"  CONSI	Footage 800 2600 4500 12800 12,600  ERVATI  MBER  NUMBE  COSTS  COSTS	47.00 35.00 32.00 21.00 5.50  NONOPERATOR Company: Appr'd by:	1,463,000  DRILLING	399,850  COMPLETION  268,800 69,300 3,000 10,000 16,000 9,000 25,000  25,000  25,000  474,600 23,730 498,330  898,180	TOTAL  8,500 37,600 91,000 144,000 268,800 69,300 13,000 10,000 34,000 9,000 25,000 25,000 8,500 15,000 783,700 39,185 822,885 2,685,735
Conductor P Surf. Casing Intermediate Intermediate Production Tubing Float Equip. Valves & Fitt Wellhead Ec Packer & Do Separator/Hi Rods & Pum Pumping Un Dehyd./Com Tanks Meter & Mete Flowlines & ( Pipeline/RO) Installation C Misc. Equipn Other	A Cosg  a Coss  a Coss	TOTAL IN  CA  Contingencie  TOTAL TO  GIBLE & INTA  Edge WI (%)	Size 20" 13 3/8" 9 5/8" 5 1/2" 2 7/8"  CONSI	Footage 800 2600 4500 12800 12,600  ERVATI  MBER  NUMBE  COSTS  COSTS	47.00 35.00 32.00 21.00 5.50  NONOPERATOR Company: Apprd by: Title:	1,463,000  DRILLING	399,850  COMPLETION  268,800 69,300 3,000 10,000 9,000 25,000 25,000 25,000 15,000 474,600 23,730 498,330	TOTAL  8,500 37,600 91,000 144,000 268,800 69,300 13,000 10,000 34,000 9,000 25,000 25,000 8,500 - 15,000 - 783,700 39,185 822,885

# **EDGE PETROLEUM CORPORATION**

WELL SUMMARY

LEASE: WELL:

SOUTH LUSK 28 FED

No. 1 LEA CO., NM

SURF LOC: SWSW SECTION 28, T19S, R32E

BHL: STRAIGHT HOLE

ENGR:

JIM KEISLING

RIG: ELEV.

AREA:	No. 1 LEA CO., NM			X:	STRAIGHT HOLE 671241 591793		RIG: ELEV. KB:	3539'	
FIELD: IRECTIONAL		SANDS/	DEF	тн	CASING	HOLE	CASING	MUD WT.	MAXIMUN DOGLEG
	LOGGING	MARKERS	TVD 40'	MD 40'	PROFILE	SIZE	DETAILS 30" Conductor	& TYPE	SEVERITY
			800'	800'		26"	20", 106 ppf H-40, STC	SPUD MUD 8.8 PPG	2 <sup>0</sup> /100'
			2600'	2600'		17 1/2"	13 3/8", 68 ppf K-55, STC 800'-2600'	10.0-10.3 ppg brine wtr 800'-2600'	
		Yates	2655'	2655'		<u> </u>	TOC @ 2400'		
		Capitan	3062'	3062'		12 1/4"			
STRAIGHT HOLE	E-LOGS NONE	Delaware	4500'	4500'			9 5/8", 47 ppf K-55, STC 0'-4500'	10.0-10.3 ppg brine wtr 2600'-4500'	20/100
							TOC @ 4400'		
								8.4-8.9 ppg fresh gel 4500'-8500' CI - 1-8000	
		Wolfcamp rf	10415'	10415'					
								8.4-8.9 ppg fresh gel 8500'-10600'	
	}	Strawn	11290'	11290'		8-1/2"		CI - 130-145K	
		Atoka Clastic Atoka Sand	11740' 11995'	11740' 119985'					
		Upper Morrow	12125	12125'					
		Middle Morrow  Lower Morrow	12345' 12570'	12345' 12570'					
STRAIGHT HOLE	E-LOGS Triple Combo 4500' to 12800'	Mississippi Im TD	12685'	12685' 12800'			5 1/2", 20#, N-80, LTC 0'-12800'	9.5-9.9 ppg brine, XCD starch 10600'-12800'	2°/100°

#### **EDGE PETROLEUM CORPORATION** PROSPECT WELL - GEOLOGICAL FORECAST

**DISTRICT:** SE New Mexico PROSPECT: South Lusk

AREA: South Lusk

EDGE W.I.:

N.R.I.:

WELL NAME & No.: South Lusk Federal 28 #1

LOCATION: 660' FSL & 660' FWL

Township 19S / Range 32E / Section 28

COORDINATES: X=

COUNTY: Lea Co.

STATE: NM

**ELEVATION:** GL = 3539 KB = 3554

TOTAL DEPTH: 12,800'

·			ESTIMATED PAY		
FORMATION / PALEO	SUBSEA - TOP	MD - TOP	OIL	GAS	REMARKS
Anydrite	+2684	870'		1	
Yates	+899	2655'			
Delaware	-1221	4775'	Oil		
Bone Springs Im	-3756	7310'			
1 <sup>st</sup> Bone Springs sd	-4926	8480	Oil		
2 <sup>nd</sup> Bone Springs sd	-5586	9140	Oil	Gas	
3 <sup>rd</sup> Bone Springs sd	-6476	10030'	Oil	Gas	
Wolfcamp rf	-7106	10660'		Gas	Poss Geopressure
Strawn Im	-7726	11280'			
Atoka Clastics	-8166	11720'		Gas	Fresh water sensitive
Morrow Im	-8406	11960'		Gas	Fresh water sensitive
Middle Morrow sd	-8746	12300'			
Lower Morrow sd	-9006	12560'			
Barnett sh	-9106	12660'			

**CASING PROGRAM (APPROX. DEPTHS)** 

SURFACE:

TYPE: Single completion

LINER:

INTERMEDIATE:\_

PRODUCTION: 51/2" @ TD 12800

SAMPLE PROGRAM (DEPTH, INTERVALS): Wellsite geologist should be on the location at 4600' for the first shallow objective, the Delaware sand. Samples should be caught and examined in 10' intervals. Wet samples as wells as dry samples should be examined for shows and notated on sample log

### MUD LOGGING PROGRAM (START DEPTH, TYPE OF UNIT)

Surface to 890' 8.4 - 9.4 ppg, Visc 32-34

890' - 2,750' 2,750' - 4,760' 10 ppg, Visc 28, Chi 186k ppm

9.0 - 9.2 ppg, Visc 28, Chl 80-100k ppm

4.760' - 8.000' 8.4 - 8.6 ppg, Visc 28, Chl 3-15k ppm

8.6 - 9.4, Visc 28, Chi 15-100k ppm 8,000' - 9,940'

9,940 - 11,7009.4 - 9.5, Visc 30-32, Chl +100k ppm, WL 10cc

11,700 - 12,80011 - 11.5, Visc 38-42, Chl 4-6k ppm, WL 8 - 6 cc

LOGGING PROGRAM (DEPTH, TYPE LOG, COMPANY): CNL/LDT, GR, Caliper, PEF from TD - csg, W/GR CNL continued from csg to surface. PEF curve set to full scale, 1" Correlation log on CNL/LDT only. DLL, W/RXO, GR Caliper From TD to csg.

POTENTIAL SIDEWALL CORES:

Delaware

4755'

3<sup>rd</sup> Bone Springs sd

9975'

Atoka sd 11690' - 11940' Mid & Lwr Morrow sd 12305' to 12605'

POTENTIAL DST ZONES:

Wolfcamp reef 10560'

Strawn Im

11235

11690' - 11940' Atoka sd Mid & Lwr Morrow sd 12305' to 12605'

DEPTH AT WHICH HOLE MUST BE IN SHAPE FOR DST's, MUD LOGGING AND CORING

Intermediate csg pt

TOP OF ABNORMAL PRESSURE

T/Atoka sd 11690' (interval for sand development 11690' - 11940')

MUD WEIGHT @ INTERMEDIATE CASING POINT

MUD WEIGHT @ TD: 9.9 ppg

REMARKS: