STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

APPLICATIONS OF CIMAREX ENERGY CO. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

Case Nos. 23594, 23595, 23596, 23597, 23598, 23599, 23600 & 23601

PREHEARING STATEMENT

Cimarex Energy Co., ("Cimarex"), OGRID No. 215099, through its undersigned attorneys, submits the following Prehearing Statement pursuant to the rules of the Oil Conservation Division ("Division") for the above referenced Cases which are consolidated with the Case Nos. 23452-23455, and 23508 – 23523 for a contested hearing pursuant to that certain "Further Amended Pre-Hearing Order" issued on June 8, 2023. This Prehearing Statement describes the status of Cimarex's Case Nos. 23594 - 23601, which were originally filed in response to Read & Stevens, Inc., in association with Permian Resources Operating, LLC (collectively referred to herein as "Permian Resources") proposing to pool the Wolfcamp formation underlying Sections 5 and 8, and Sections 4 and 9, in Township 20 South, Range 34 East, NMPM, Lea County ("Subject Lands") in Case Nos. 23512-23515 and 23520 – 23523.

APPEARANCES

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COMPETING PARTY

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APPLICANT'S STATEMENT OF THE CASES

Cimarex provides this Prehearing Statement to inform the Division of the current status of Case Nos. 23594, 23595, 23596 and 23597, 23598, 23599, 23600 & 23601. A little more than a month after Cimarex filed its applications to develop and pool the Bone Spring formation in the Subject Lands, Permian Resources not only filed applications for the Bone Spring but also filed applications for drilling and pooling the Wolfcamp formation in the Subject Lands in Case Nos. 23512-23515 and 23520 – 23523, and proposed to drill wells in the Upper Wolfcamp of the Subject Lands despite the fact that, based on the geological and reservoir data, those wells would drain the 3rd Bone Spring Sand and would likely result in permanent damage to the target reservoir located in the Bone Spring where the target reservoir is located.

Permian Resources' decision to propose to develop the Upper Wolfcamp created a dilemma for Cimarex. On the one hand, Cimarex understood, based on clear geological and reservoir data, that the Upper Wolfcamp should not be developed in the Subject Lands but, on the other hand, Cimarex understood that once Permian Resources filed its application to pool the Upper Wolfcamp, Cimarex needed to provide a counter proposal that would oppose Permian Resources' Upper Wolfcamp applications.

Consequently, Cimarex drafted competing pooling applications for the Wolfcamp in which it explained that the best way to develop the target reservoir is by drilling wells in the 3rd Bone Springs Sands, the same wells proposed by Cimarex's Bone Spring applications and prohibit the drilling of wells in Upper Wolfcamp to prevent drainage from and damage to the target reservoir. Cimarex filed its Wolfcamp applications in Case Nos. 23594 – 23601, in which it dedicated the Wolfcamp units exclusively to wells drilled in the 3rd Bone Spring Sands, and not in the Upper Wolfcamp, in order preserve the Upper Wolfcamp from being drilled and thereby protect the 3rd Bone Spring Sand from drainage and damage.

Cimarex has further evaluated its applications in Case Nos. 23594 – 23601 as a response to the applications filed by Permian Resources in Case Nos. 23512 – 23515 and 23520 – 23523, and Cimarex has determined that the best way to develop the Subject Lands and both protect the primary reservoir of said Lands while optimizing production is to request that the Division establish a protective zone covering the Upper Wolfcamp in order to protect correlative rights and prevent waste.

As a result, Cimarex has filed a Motion for an Order to Prohibit the Drilling of Wells in the Upper Wolfcamp in Order to Protect Correlative Rights and Optimize Production of the Subject Lands ("Motion"), attached hereto as Exhibit 1, in which it has asked the Division to consider and rule on the Motion as part of the Division's ruling in the contested hearing. Should the Division decide that Cimarex has the better development plan, then the Upper Wolfcamp would not be drilled.

APPLICANT'S PROPOSED EVIDENCE AND WITNESS QUALIFICATIONS

WITNESS

ESTIMATED TIME

EXHIBITS

Landman: John Coffman Approx. 5 min Approx. 1

Qualifications: I graduated in 2018 from Texas Tech University with a bachelor's degree in Business Administration with an emphasis on Energy Commerce. I have worked at Cimarex for approximately 4 years, and I have been working in New Mexico for 4 years. My credentials as an expert witness in petroleum land matters have been accepted by the Division and made a matter of record.

Geologist: Staci Meuller Approx. min Approx. 21

Qualifications: I have a Bachelor of Science Degree in Geophysical Engineering from Colorado School of Mines, and a Master of Science Degree in Geophysics from Colorado School of Mines. I have worked on New Mexico Oil and Gas matters since July 2018. My credentials as an expert witness in geology have been accepted by the Division and made a matter of record.

Reservoir Engineer: Eddie Behm Approx. 45 minutes Approx. 17

Qualifications: I attended the University of Tulsa and graduated with a bachelor's in petroleum engineering in 2011. I have worked for Occidental, California Resources prior to working for Cimarex and have been employed as a Production and Reservoir engineer for Cimarex for the last 6 years, working in the Delaware Basin with a primary focus on Lea County, New Mexico. I have

previously testified before the Division as an expert reservoir engineer, and my credentials have been accepted of record.

Facilities Engineer: Calvin Boyle Available for questions (15 min) Approx. 1 Qualifications: I attended the University of Oklahoma and graduated with a bachelor's in petroleum engineering in 2016 followed by Oklahoma State University where I graduated with a Master of Business Administration in 2018. I worked for Halliburton prior to working for Cimarex Energy Co. ("Cimarex") and have been employed as a Field, Production, and Facilities engineer for Cimarex for the last 4 years, working in the Delaware Basin with a primary focus on Lea County, New Mexico. I am familiar with the subject applications filed in the above-referenced Cases and the engineering involved. I have not testified previously before the Division and am providing a one-page resume.

LIST OF MATERIAL FACTS NOT IN DISPUTE

Parties are in general agreement that the Bone Spring formation underlying the Subject

Lands would be productive if drilled and developed and should be developed; however, there is

disagreement about whether the Upper Wolfcamp should be drilled and developed simultaneously
with the Bone Spring.

LIST OF DISPUTED FACTS AND ISSUES

The central issue in Cimarex's Case Nos. 23594 - 23601 and Permian Resources' competing Case Nos. 23512 – 23515 and 23520 - 23523 is whether the Upper Wolfcamp should be drilled and developed (Cimarex asserts that the drilling of the Upper Wolfcamp would result in waste and harm to correlative rights and to the target reservoir, and therefore the Upper Wolfcamp should not be drilled; while Permian Resources proposes to drill the Upper Wolfcamp). As an alternative to drilling the Upper Wolfcamp, Cimarex has filed a Motion to establish a protective buffer zone in the Upper Wolfcamp to prevent it from being drilled.

PROCEDURAL MATTERS

For Cimarex's Case Nos. 23594 – 23601 and Permian Resources' Case Nos. 23512 – 23515 and 23520 – 23523, Cimarex requests that the Division review and consider the Motion (attached

hereto as Exhibit 1) that Cimarex has filed concerning the Wolfcamp formation and how best to develop the Subject Lands.

Respectfully submitted,

ABADIE & SCHILL, PC

/s/ Darin C. Savage

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Attorneys for Cimarex Energy Co.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was filed with the New Mexico Oil Conservation Division and was served on counsel of record via electronic mail on July 13, 2023:

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Attorneys for Sandstone Properties, LLC

/s/ Darin C. Savage

Darin C. Savage

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STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

APPLICATIONS OF CIMAREX ENERGY CO.
FOR A HORIZONAL SPACING UNIT
AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

Case Nos. 23448 – 23455

APPLICATIONS OF CIMAREX ENERGY CO. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

Case Nos. 23594 - 23601

APPLICATIONS OF READ & STEVENS, INC. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

Case Nos. 23508 – 23523

MOTION FOR AN ORDER TO PROHIBIT THE DRILLING OF WELLS IN THE UPPER WOLFCAMP IN ORDER TO PROTECT CORRELATIVE RIGHTS AND OPTIMIZE PRODUCTION OF THE SUBJECT LANDS

Cimarex Energy Co., ("Cimarex"), through its undersigned attorneys, respectfully requests that the New Mexico Oil Conservation Division ("Division") issue an order prohibiting the drilling of horizontal wells in the Upper Wolfcamp in Sections 4, 5, 8 and 9, Township 20 South, Range 34 East, NMPM, Lea County ("Subject Lands") to protect correlative rights and optimize production of the Subject Lands. In support of its Motion, Cimarex submits the following:

I. Factual and procedural background

1. Cimarex has been preparing to develop Subject Lands since 2018. Based on its detailed analysis of the specific geology and reservoir characteristics of this area, on March 9, 2023, Cimarex filed applications in Case Nos. 23448 through 23455 for the compulsory pooling

EXHIBIT 1

of the Bone Spring formation underlying the Subject Lands, proposing the Mighty Pheasant Wells for units in Sections 5 and 8, and proposing the Loosey Goosey Wells for units in Sections 4 and 9.

- 2. As a result of its evaluation of the Subject Lands, as well as the surrounding area, Cimarex found that not only were the best reserves of oil and gas residing in the 3rd Bone Spring Sand but also that the Upper Wolfcamp reservoir under the Subject Lands and surrounding area was significantly below average in quality and potential, rendering Wolfcamp wells economically unfeasible. *See* Exhibit 1, attached hereto, showing that the consensus landing for optimal development is the 3rd Bone Spring Sands, not the Upper Wolfcamp.
- 3. Cimarex has also determined that there are no indications of any major geomechanical changes/frac baffles in between Cimarex's 3rd Sand target and Permian Resources' Wolfcamp Sands target, indicating that these two intervals are most likely one shared reservoir tank. Due to the absence of the baffle between the 3rd Bone Spring Sand and the Upper Wolfcamp, Cimarex has concluded that if Upper Wolfcamp wells were to be completed while drilling and developing the 3rd Bone Spring Sand, those wells would drain much of the reserves in the 3rd Bone Spring Sand, where the best reserves are located, and would likely result in permanent damage to the target reservoir in the 3rd Bone Spring Sand.
- 4. Thus, Cimarex limited its proposed development and applications for compulsory pooling to the Bone Spring and did not seek to pool the Upper Wolfcamp. Cimarex's analysis of the Subject Lands comports to how other operators are developing the surrounding areas that share the same three fundamental characteristics, *viz.*, excellent reserves in the 3rd Bone Spring Sand, poor quality reservoir in the Upper Wolfcamp, and the lack of a baffle between the two. *See* Exhibit 2, attached hereto, showing the overwhelming predominance of Bone Spring development

and the dearth and rarity of the Wolfcamp development.

- 5. A little more than a month after Cimarex filed is applications to develop and pool the Bone Spring Formation, Read & Stevens, Inc., in association with Permian Resources Operating, LLC (collectively referred to as "Permian Resources"), filed competing applications to pool the Bone Spring formation of the Subject Lands in Case Nos. 23508-23511 and 23516-23519. Permian Resources also filed applications for drilling and pooling the Wolfcamp formation in Case Nos. 23512-23515 and 23520-23523, proposing to drill eight wells in the Upper Wolfcamp despite the fact that those wells would drain the 3rd Bone Spring Sand and would likely result in permanent damage to the target reservoir located in the Bone Spring where the best reservoirs are located.
- 6. Given the poor quality of the Upper Wolfcamp reservoir, the lack of the baffle that would otherwise minimize drainage of the 3rd Bone Spring, the fact that additional Upper Wolfcamp wells will not increase EUR, and the recent history of developing the lands in the area that account for these facts, Permian Resources' decision to seek to develop the Upper Wolfcamp Formation is baffling. The geological data demonstrates that expending tens of millions of dollars¹ drilling unnecessary wells in the Upper Wolfcamp that will not increase EUR, but instead would place a substantial financial burden on Working Interest owners, incur environmental risks of drilling additional and unnecessary wells, undermine overall production, and likely result in permanent damage to the target reservoir, creating waste of oil and gas that would be forever lost through the misguided development of the Upper Wolfcamp. See Exhibit 4
- 7. Permian Resources' decision to propose to develop the Upper Wolfcamp created a dilemma for Cimarex. On the one hand, based on clear geological and reservoir data, Cimarex

¹ Permian Resources is proposing to drill eight Upper Wolfcamp wells on the Subject Lands at a total estimated cost of \$95,022,896. *See*: Permian Well Proposals, a copy of which are attached hereto as Exhibit 3.

knew, that the Upper Wolfcamp should not be developed on the Subject Lands but, on the other hand, Cimarex understood that once Permian Resources filed its application to pool the Upper Wolfcamp, Cimarex needed to provide a counter proposal that would oppose Permian Resources' Upper Wolfcamp applications.

8. Consequently, Cimarex drafted competing pooling applications for the Upper Wolfcamp in which it explained that the best way to develop the target reservoir is by drilling wells in the 3rd Bone Springs Sands, the same wells proposed by Cimarex's Bone Spring applications and prohibit the drilling of wells in Upper Wolfcamp to prevent drainage from and damage to the target reservoir. Cimarex filed its Wolfcamp applications on June 5, 2023, in Case Nos. 23594 – 23601, in which it dedicated the Wolfcamp units exclusively to wells drilled in the 3rd Bone Spring Sands, and not in the Upper Wolfcamp, in order preserve the Upper Wolfcamp from being drilled and thereby protect the 3rd Bone Spring Sand from drainage and damage.

II. Argument

- A. The optimal development of the Subject Lands is to drill wells in the 3rd Bone Spring Sand and create a protective buffer zone that would prohibit the drilling of wells in the Upper Wolfcamp.
- 9. In order to protect the abundant reserves in the 3rd Bone Spring Sand and avoid the inherent damage that Permian Resources' proposed Upper Wolfcamp wells would inflict on the reservoir, the Division should create a buffer zone that prohibits development of the subpar Upper Wolfcamp. The history and practice of achieving optimal development in the area surrounding the Subject Lands has repeatedly been demonstrated over the years by the fact the operators who were free to drill in both the Bone Spring and Wolfcamp decided to develop the 3rd Bone Spring Sands and to forego drilling any Upper Wolfcamp wells. *See* Exhibits 1 and 2, attached hereto.
 - 10. Cimarex filed its Wolfcamp applications only as a response to Permian Resources'

unexpected and imprudent Wolfcamp applications as a means to prevent Permian Resources from making the mistake of drilling the costly, wasteful, and unnecessary Upper Wolfcamp wells. In its competing Wolfcamp applications, Cimarex emphasized that only the 3rd Bone Spring Sands should be drilled and not the Upper Wolfcamp, consistently advocating that the Division should not allow the drilling of Upper Wolfcamp wells on the Subject Lands.

- Wolfcamp based on wells drilled in 3rd Bone Spring Sand may not be the best way to protect correlative rights and counter Permian Resources' plan for the Upper Wolfcamp. Cimarex submits that the best course of action for the Division to follow, in order to ensure achieving optimal production from the rich reserves located in the 3rd Bone Spring Sand and to protect correlative rights, would be to allow the drilling of the 3rd Bone Spring Sand wells, as proposed by Cimarex, and to establish a vertical protective zone that would preclude the drilling of wells in the subpar Upper Wolfcamp. Such a protective zone would prevent drainage of the 3rd Bone Spring, thus protecting the correlative rights of the owners in the 3rd Bone Spring. In addition, the protective zone would spare the working interest owners approximately \$95 Million for wells that not only fail to increase the EUR but would also likely damage the reservoir. Cimarex has carefully analyzed the need for such a protective buffer zone and provides in Exhibit 5, attached hereto, a graphic depiction and quantification of the area and extent of the Upper Wolfcamp that needs to be protected.
- 12. The Division has the clear authority to fashion such a necessary solution and establish a protective zone under NMSA 1978 Section 70-2-11, which grants the Division authority "to do whatever may be reasonably necessary" to protect correlative rights, prevent waste, and prevent the drilling of unnecessary wells. The wells proposed to be drilled by Permian

Resources in the Upper Wolfcamp are clearly unnecessary, wasteful, and unwarranted based on the geological and reservoir data.

13. When Cimarex drafted its competing application to pool the Wolfcamp formation as a counter to Permian Resources' Wolfcamp application, it did so with the intent of dedicating the Wolfcamp unit to a well drilled in the 3rd Bone Spring in order to prevent the Upper Wolfcamp from being drilled and establishing the Upper Wolfcamp as a buffer zone. Cimarex submits this Motion with the same intent - to prohibit the drilling of wells in the Upper Wolfcamp by creating a protective buffer zone that would prevent drainage of the target reservoir, protect correlative rights, prevent waste, avoid the drilling of unnecessary wells, and protect the target reservoir from harm and damage. Thus, Cimarex by this Motion respectfully requests that its competing applications in Case Nos. 23594, 23595, 23596, 23597, 23598, 23599, 23600, and 23601 to pool the Wolfcamp formation be dismissed; that the Division establish a protective buffer zone that prohibits the drilling of wells in the Upper Wolfcamp; and that the Division require any operator who wants develop the Lower Wolfcamp, below the proposed buffer zone, to file a separate pooling application that specifically targets the Lower Wolfcamp.

III. Conclusion:

Cimarex respectfully requests that the Division consider this Motion as part of the contested hearing for the above-referenced cases during which Cimarex and Permian Resources will be presenting their respective plans for the development of the Subject Lands. Permian Resources' development plans consist of drilling both the Bone Spring and Upper Wolfcamp formations; whereas, Cimarex's development plans consist of drilling only the Bone Spring formation to achieve optimal production of the Subject Lands that protects correlative rights and avoids waste.

If the Division finds Cimarex's production data and analysis of the geology and target reservoir to be accurate and persuasive, and as a result, decides to grant Cimarex operatorship of the Subject Lands by approving its applications for the Bone Spring, then concurrently with the Division's decision, Cimarex respectfully asks the Division to grant this Motion by enacting the following: (1) Dismiss Cimarex's applications for the Wolfcamp in Case Nos. 23594, 23595, 23596, 23597, 23598, 23599, 23600, and 23601, and as an alternative to pooling the Wolfcamp, pool only the Bone Spring formation underlying the units proposed by Cimarex in Case Nos. 23448 – 23455; (2) establish a protective buffer zone covering the Upper Wolfcamp below the base of the Bone Spring that would prohibit the drilling of wells in the Upper Wolfcamp in order to protect the correlative rights of the owners, prevent waste and optimize production from the Subject Lands; and (3) deny the applications filed by Permian Resources that propose to pool the Wolfcamp formation for the purpose of drilling the Upper Wolfcamp and require any operator wanting to develop the Lower Wolcamp, below the protective zone, to file separate applications that actually target the Lower Wolfcamp, and not the Upper Wolfcamp.

Respectfully submitted,

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Attorneys for Cimarex Energy Co.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was filed with the New Mexico Oil Conservation Division and was served on counsel of record via electronic mail on July 13, 2023:

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Attorneys for Sandstone Properties, LLC

/s/ Darin C. Savage

Darin C. Savage

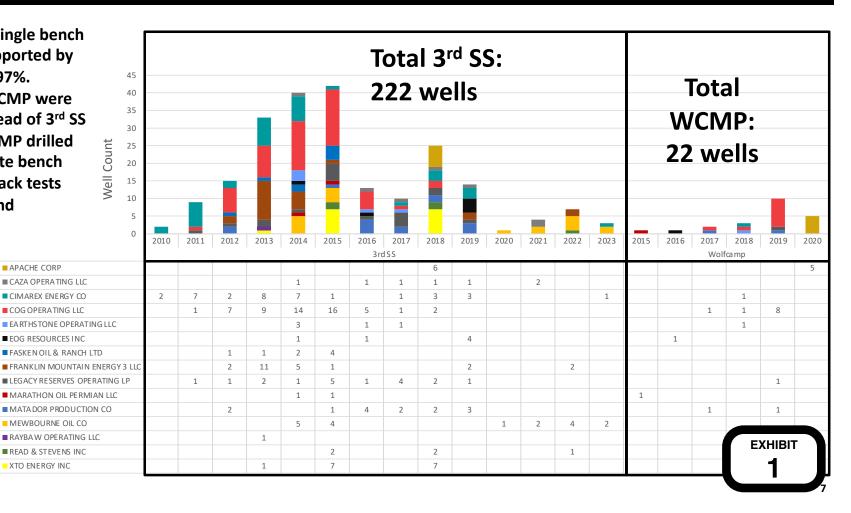


Well Count by Landing and Operators Shows 3rd Sand is the Consensus Landing

- 3rd Sand / single bench landing supported by 236 wells, 97%.
- 13 of 22 WCMP were drilled instead of 3rd SS
- 5 of 22 WCMP drilled as a separate bench
- 3 WCMP stack tests with 3rd Sand

APACHE CORP

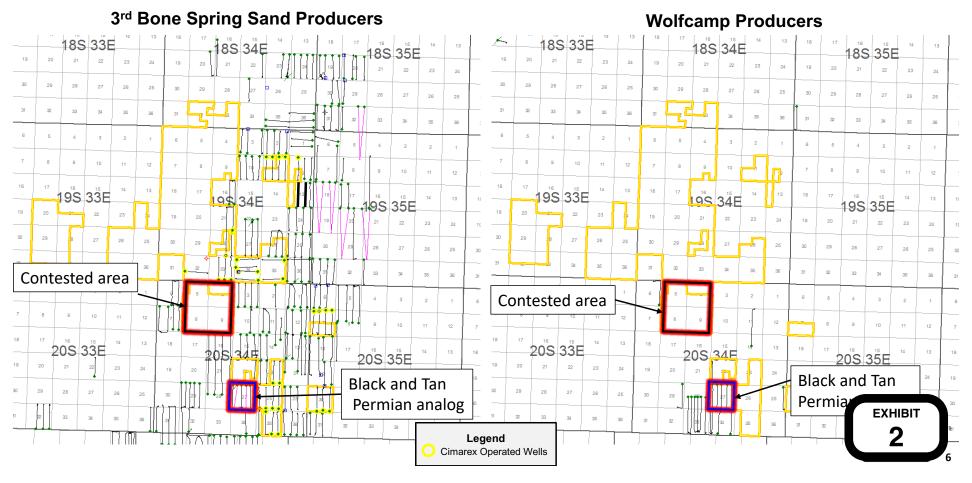
XTO ENERGY INC



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3rd Bone Spring Sand is the Established Single Bench Target at 4 WPS within AOI

42,650 acres developed with more than 1 well, all but one development, 98.5% of sections similar to Cimarex proposal



Permian Resources Operating, LLC 300 N. Martenfeld St., Ste. 1000 Midland, TX 79701 Phone (432) 695-4222 • Fax (432) 695-4063

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INTANGIBLE COSTS ILand/Legal/Regulatory 2 Location, Surveys & Damages 4 Freight/Transportation 5 Rental - Surface Equipment 6 Rental - Downhole Equipment 7 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 13 Fael & Power 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Sikekline 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 19 Perforating, Wireline, Sikekline 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 20 Mad Circulation System 21 Mud Logging 22 Logging, Formation Evaluation 23 Mud & Chemicals 23 Water 25 Stimulation 26 Stimulation 26 Stimulation 27 Stimulation 27 Stimulation 28 Mud/ Wastewater Disposal 30 Rig Sopervision/Engineering 28 Drig & Completion Overhead 31 Labor 49 Proparati 51 Insurance 97 Contingency 99 Plugging & Abandonment TOTAL II TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Liner 65 Tubbing 64 Production Liner 65 Tubbing 64 Production Liner 65 Tubbing 66 Wellhead 67 Packers, Liner Hangers 66 Tubks 69 Production Usesels 70 Flow Lines 71 Rod String 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pamps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning, Facility Pliping 80 Gathering, Facility Containment 83 Flare Stack 84 Liner 85 Flare Stack 86 Liner Liner 87 Liner Liner 88 Flare Stack 98 Liner Liner 99 Production Engineer: 90 Drilling Engineer: 91 Completions Engineer: 92 Drilling Engineer: 94 Drilling Engineer: 95 Drilling Engineer: 95 Drilling Engineer: 96 Drilling Engineer: 97 Completions Engineer: 96 Drilling Engineer: 97 Completions Engineer: 97 Drilling Engineer: 98 Drilling Engineer: 99 Dri		DRILLING COSTS 59,066 288,079 47,628 124,327 205,124 48,083 429,543 753,820 100,176 188,933 243,296 105,209 17,529 7,220 361,835	COMPLETION COSTS 18,067 43,778 215,417 39,863 51,480	COMPLETION DAYS: es drilling, completions, i PRODUCTION COSTS 37,300 25,000 105,000	19 flowback and Initial TOTAL COSTS 5 96,566 308,647 116,406 444,744 265,229 102,562 429,543 7253,820 100,76 913,996 243,296 15,000 393,136
INTANGIBLE COSTS ILand/Legal/Regulatory 2 Location, Surveys & Damages 4 Freight/Transportation 5 Rental - Surface Equipment 6 Rental - Downhole Equipment 7 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 13 Fael & Power 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Sikekline 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 19 Perforating, Wireline, Sikekline 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 20 Mad Circulation System 21 Mud Logging 22 Logging, Formation Evaluation 23 Mud & Chemicals 23 Water 25 Stimulation 26 Stimulation 26 Stimulation 27 Stimulation 27 Stimulation 28 Mud/ Wastewater Disposal 30 Rig Sopervision/Engineering 28 Drig & Completion Overhead 31 Labor 49 Proparati 51 Insurance 97 Contingency 99 Plugging & Abandonment TOTAL II TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Liner 65 Tubbing 64 Production Liner 65 Tubbing 64 Production Liner 65 Tubbing 66 Wellhead 67 Packers, Liner Hangers 66 Tubks 69 Production Usesels 70 Flow Lines 71 Rod String 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pamps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning, Facility Pliping 80 Gathering, Facility Containment 83 Flare Stack 84 Liner 85 Flare Stack 86 Liner Liner 87 Liner Liner 88 Flare Stack 98 Liner Liner 99 Production Engineer: 90 Drilling Engineer: 91 Completions Engineer: 92 Drilling Engineer: 94 Drilling Engineer: 95 Drilling Engineer: 95 Drilling Engineer: 96 Drilling Engineer: 97 Completions Engineer: 96 Drilling Engineer: 97 Completions Engineer: 97 Drilling Engineer: 98 Drilling Engineer: 99 Dri		DRILLING COSTS 59,066 288,079 47,628 124,327 205,124 48,083 429,543 753,820 100,176 188,933 243,296 105,209 17,529 7,220 361,835	COMPLETION COSTS 18,067 43,778 215,417 39,863 51,480	PRODUCTION COSTS 37,300 2,500 25,000 105,000 15,000	Flowback and Initial TOTAL COSTS \$ 96,566 308,647 116,406 444,744 2265,229 102,562 429,543 723,820 100,756 913,996 243,296 15,000 393,136
REMARKS: AL install INTANGIBLE COSTS I Land / Legal / Regulatory 2 Location, Surveys & Damages 4 Freight / Tonaportation 5 Rental - Surface Equipment 6 Rental - Downhole Equipment 7 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 13 Faul & Power 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Perforating, Wiretine, Sikekline 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 20 Mad Circulation System 21 Med Legging 22 Logging / Formation Evaluation 23 Mud & Chemicals 23 Water 23 Mud Formation Evaluation 25 Stimulation 26 Mud / Wastewater Disposal 30 Rig Supervision / Engineering 20 Drig & Completion Overthead 31 Labor 34 Proppant 55 Insurance 97 Contingency 99 Plugging & Abandonment TOTAL II TANGIBLE COSTS 60 Surface Casing 61 Drilling Limer Cost 67 Packers, Liner Hangers 68 Tubks 69 Production Usesels 70 Flow Lines 61 Tubks 69 Production Usesels 70 Flow Lines 71 Red string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pamps 76 Downhole Pumps 77 Artificial Lift Equipment 78 Gas Conditioning / Dehydration 79 Gas Conditioning Pohydration 79 Gas Conditioning Pohydration 79 Gas Conditioning Pohydration 79 Gas Conditioning Pohydration 79 Gas Conditioning 60 Cathering Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / ScADA 66 Instrumentation / Safety Drilling Engineer: Completions Engineer: Might Production Engineer: Completions Engine		DRILLING COSTS 59,066 288,079 47,628 124,327 205,124 48,083 429,543 753,820 100,176 188,933 243,296 105,209 17,529 7,220 361,835	COMPLETION COSTS 18,067 43,778 215,417 39,863 51,480	PRODUCTION COSTS 37,580 2,500 25,000 105,000 	TOTAL COSTS \$ 96,566 308,647 110,406 444,744 265,229 102,562 429,543 723,820 100,776 913,996 243,296 15,000 393,136
INTANGIBLE COSTS I Land/ Legal/ Regulatory 2 Location, Surveys & Damages 4 Freight/ Transportation 5 Rental - Surface Equipment 6 Rental - Downhole Equipment 7 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 13 Fael & Power 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Sikekline 17 High Pressure Pump Truck 16 Completion Unit, Swab, CTU 20 Mad Circulation System 21 Mod Logging 22 Logging, Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation Flowback & Disp 28 Mud/ Wastewater Disposal 30 Rig Supervision / Engineering 22 Drig & Completion Overhead 35 Labor 36 Propant 39 Insurance 97 Contingency 99 Plugging & Abandonment TCTAL II TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling, Liner 63 Production Casing 64 Production Casing 64 Production Unier 65 Tubis 65 Tubis 66 Praduction Vessels 77 Rod string 77 Artificial Lift Equipment 78 Compressor 78 Installation Costs 79 Convingency 79 Interconnecting Recility Piping 80 Gathering, Fully Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / ScADA 66 Instrumentation / Safety Drilling Engineer: Completions Engineer: Completion Engineer: Completions Engineer: Completions Engineer: Completions Engineer: Completion Engine	\$	COSTS 59,066 288,079 47,628 124,327 205,424 48,083 429,543 753,820 100,176 188,935 243,296 105,209 17,529 7,270 361,835	COSTS 18,067 43,778 215,417 59,805 51,480 725,061 233,136 123,274 146,484	COSTS 37,580 2,590 25,000 105,000 105,000	COSTS 96,566 308,647 110,406 444,744 225,229 102,552 429,543 753,820 100,176 913,796 243,296 15,000 393,136
I Land/Legal/Regulatory 2 Location, Surveys & Damages 4 Freight/Transportation 5 Rental - Surface Equipment 6 Rental - Downhole Equipment 7 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 11 Drill Bits 13 Face & Power 11 Drilling 13 Face & Power 11 Drilling 15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Slickline 17 High Pressure Pamp Truck 18 Completion Unit, Swab, CTU 18 Completion Unit, Swab, CTU 20 Mad Circulation System 21 Mud Logging 22 Mud Circulation System 23 Mud Cydaliation System 23 Mud Cydaliation System 25 Stimulation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation Flowback & Disp 25 Mud/Wastewater Disposal 30 Rig Sopervision/ Engineering 25 Mud Wastewater Disposal 30 Rig Sopervision/ Engineering 25 Orig & Completion Overhead 35 Labor 45 Proppat 59 Plugging & Abandonment TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 66 Prackers, Liner Hangers 66 Tanks 69 Production Casing 66 Prakers, Liner Hangers 67 Packers, Liner Hangers 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Measurement & Meter Installation 75 Gas Conditioning, Dehydration 75 Gas Conditioning, Pohydration 76 Gas Conditioning, Bulk Lines 81 Valves, Dumps, Controllers 82 Tank, Facility Containment 83 Hare Stack 84 Electrical/Grounding 85 Communications/SCADA 66 Instrumentation/Safety TOTAL TOTAL	5	COSTS 59,066 288,079 47,628 124,327 205,424 48,083 429,543 753,820 100,176 188,935 243,296 105,209 17,529 7,270 361,835	COSTS 18,067 43,778 215,417 59,805 51,480 725,061 233,136 123,274 146,484	COSTS 37,580 2,590 25,000 105,000 105,000	COSTS 96,566 308,647 110,406 444,744 225,229 102,552 429,543 753,820 100,176 913,796 243,296 15,000 393,136
I Land/Legal/Regulatory 2 Location, Surveys & Damages 4 Freight/Transportation 5 Rental - Surface Equipment 6 Rental - Downhole Equipment 7 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 11 Drill Bits 13 Face & Power 11 Drilling 13 Face & Power 11 Drilling 15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Slickline 17 High Pressure Pamp Truck 18 Completion Unit, Swab, CTU 18 Completion Unit, Swab, CTU 20 Mad Circulation System 21 Mud Logging 22 Mud Circulation System 23 Mud Cydaliation System 23 Mud Cydaliation System 25 Stimulation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation Flowback & Disp 25 Mud/Wastewater Disposal 30 Rig Sopervision/ Engineering 25 Mud Wastewater Disposal 30 Rig Sopervision/ Engineering 25 Orig & Completion Overhead 35 Labor 45 Proppat 59 Plugging & Abandonment TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 66 Prackers, Liner Hangers 66 Tanks 69 Production Casing 66 Prakers, Liner Hangers 67 Packers, Liner Hangers 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Measurement & Meter Installation 75 Gas Conditioning, Dehydration 75 Gas Conditioning, Pohydration 76 Gas Conditioning, Bulk Lines 81 Valves, Dumps, Controllers 82 Tank, Facility Containment 83 Hare Stack 84 Electrical/Grounding 85 Communications/SCADA 66 Instrumentation/Safety TOTAL TOTAL	5	59,066 288,079 47,628 124,327 205,424 48,083 429,543 753,820 100,776 188,935 283,296 17,529 7,2270 361,835	18,067 43,778 215,417 59,885 54,480 7725,061 393,136 123,274	37,580 2,590 25,000 105,000 	\$ 96,566 308,647 116,406 444,744 225,529 102,562 429,543 753,820 100,76 913,996 243,296 15,000 393,136
2 Location, Surveys & Damages 4 Freight, Transportation 5 Rental - Surface Equipment 7 Rental - Surface Equipment 7 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 13 Fael & Power 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Sikekline 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 20 Mud Circulation System 21 Mud Logging 22 Logging, Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation 25 Stimulation 25 Stimulation 25 Stimulation 25 Stimulation 25 Stimulation 26 Stimulation Floopback & Disp 28 Mud / Wastewater Disposal 30 Rig Supervision / Englineering, 22 Drig & Completion Overhead 33 Labor 54 Proppant 59 Insurance 97 Contingency 99 Plugging & Abandonment TOTAL II TANGIBLE COSTS 60 Surface Casing, 61 Intermediate Casing 62 Drilling Liner 63 Production 64 Praduction 65 Tubks 69 Production User 65 Tubks 69 Production User 65 Tubks 69 Production User 71 Rost Stimulation 72 Artificial Lift Equipment 73 Gas Conditioning, Dehydration 74 Gas Conditioning, Sulk Lines 81 Yalves, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / Sacho 86 Instrument A Meter Installation 78 Gas Conditioning, Pohydration 79 Gas Conditioning, Pohydration 79 Gas Conditioning, Sulk Lines 81 Yalves, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / Sacho 86 Instrumentation / Safety TOTAL 17 18 PARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: Medical Controller 15 Parduction Engineer: Completions Engineer: Completio	5	288,079 47,628 124,327 205,424 48,083 429,543 753,820 100,176 188,933 243,296 105,209 17,529 7,220 361,835	43,778 215,417 39,863 54,480 	2,500 25,000 105,000	308,647 116,406 444,744 265,229 102,562 429,543 723,820 100,776 913,596 243,296 15,000 393,136
4 Freight / Transportation 3 4 Freight / Transportation 3 5 Rental - Surface Equipment 6 6 Rental - Downhole Equipment 7 7 Rental - Living Quarters 10 Directional Drilling, Surveys 11 10 Directional Drilling, Surveys 11 11 Drill Bits 11 12 Drill Bits 13 13 Fael & Power 14 14 Cementing & Float Equip 15 15 Completion Unit, Swab, CTU 19 16 Ferforating, Wireline, Sikelther 17 High Pressure Pump Truck 18 16 Completion Unit, Swab, CTU 20 17 Mud Calging 19 18 Completion Unit, Swab, CTU 20 18 Mud Circulation System 21 Mud Cagging 22 Logging / Formation Evaluation 23 18 Mud Capting 21 Mud Cagging 22 Logging / Formation Evaluation 23 18 Mud Cartenical 25 18 Mud Cartenical 25 18 Mud Wastewater Disposal 30 18 Rig Supervision / Engineering 22 19 Drig & Completion Overhead 35 18 Labor 25 18 Proppant 35 Insurance 27 19 Plugging & Abandonment TOTAL II TANGIBLE COSTS 60 18 Uniting Illner 63 19 Pudgeting 11 Inner 63 19 Pudgeting 11 Inner 64 19 Production Casing 64 19 Production Casing 64 19 Production Usesels 79 Flow Lines 71 17 Rod string 72 Artificial Lift Equipment 73 18 Compressor 74 Installation Costs 75 18 Insurance 14 Meter Installation 65 19 Talvas, Dumps, Controllers 25 18 Tank 7 Pacility Containment 38 19 Laves, Dumps, Controllers 25 18 Tank 7 Pacility Containment 38 18 Places Stack 48 28 Electrical / Grounding 85 29 Communications / ScADA 66 20 Instrumentation / Safety 10 Production Engineer: Metaporters of Productio		47,628 124,327 265,424 48,083 753,820 100,176 188,935 243,236 	43,778 215,417 39,863 54,480 	25,000 105,000 	116,406 444,744 265,229 107,552 479,543 753,820 100,176 913,996 243,296 15,000 993,136
S Rental - Surface Equipment 6 Rental - Downhole Equipment 7 Rental - Living Quarter 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 13 Feel & Power 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Sikekline 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 10 Perforating, Wireline, Sikekline 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 20 Med Circulation System 21 Mud Logging 22 Logging, Formation Evaluation 23 Mud & Chemicals 24 Water 25 Simulation 25 Stimulation 26 Stimulation 26 Stimulation 26 Stimulation 26 Stimulation 26 Stimulation 26 Stimulation 27 Singulation 28 Truck 28 Long 28 Completion Overhead 31 Labor 31 Ling 32 Drig & Completion Overhead 33 Labor 34 Propant 35 Insurance 37 Contingency 39 Plugging & Abandonment 36 Intermediate Casing 46 Production Uniter 46 Production Liner 46 Truck 46 Production Liner 46 Truck 47 Packers, Liner Hangers 46 Truck 47 Packers, Liner Hangers 46 Truck 48 Truck 49 Production Uniter 48 Truck 49 Production Uniter 49 Production Uniter 40 Truck 40 Truck 41 Lines 41 Valves, Dumps 42 Artificial Lift Equipment 43 Compressor 43 Installation Costs 55 Surface Pamps 45 Downhole Pumps 47 Measurement & Meter Installation 48 Glars Stack 48 Electrical, Grounding 48 Communications, SCADA 46 Instrumentation, Safety 40 Total 17 Total 18 PARED BY Permian Resources Ope 18 Drilling Engineer: 18 Completions Engineer: 18 Completions Engineer: 29 Drilling Engineer: 20 Completions Engineer: 20 Drilling Engineer: 21 Completions Engineer: 22 Drilling Engineer: 23 Completions Engineer: 24 Drilling Engineer: 25 Drilling Engineer: 26 Drilling Engineer: 27 Completions Engineer: 28 Drilling Engineer		124,327 205,424 48,083 429,543 753,820 100,176 188,935 243,296 105,209 17,529 7,220 361,833	215,417 59,885 54,480 	105,000	444,744 265,229 102,562 429,543 725,820 100,76 913,996 243,296 15,000 393,136
13 Faci & Power 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Sikkhlue 17 High Pressure Pamp Truck 18 Completion Unit, Swab, CTU 20 Mad Circulation System 21 Mud Logding 21 Mud Logding 22 Logging, Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation 25 Stimulation Flowback & Disp 28 Mud/ Wastewater Disposal 30 Rig Sopervision / Engineering 25 Stimulation 25 Stimulation 25 Stimulation 25 Stimulation 26 Sundy Authority 27 Stimulation 26 Mud/ Wastewater Disposal 30 Rig Sopervision / Engineering 30 Rig Sopervision / Engineering 31 Rig Sopervision / Engineering 32 Drig & Completion Overhead 33 Labor 45 Propant 39 Insurance 99 Plugging & Abandonment TANGIBLE COSTS 66 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 66 Wellhead 67 Packers, Liner Hangers 66 Tanks 66 Production User 67 Flow Lines 77 Rod String 78 Installation Costs 78 Surface Pumps 79 Downhole Pumps 77 Measurement & Meter installation 78 Gas Conditioning, Dehydration 79 Gas Conditioning, Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack 84 Electrical Grounding 85 Communications / Sacha 86 Instrumentation / Safety TOTA TOTAL		48,083 429,543 753,820 100,176 188,933 283,296 105,209 17,529 7,220 361,835	725,961 725,961 393,136 123,274 146,484	15,000	102,552 429,543 753,820 100,776 913,996 243,296 15,000 393,136
10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 13 Feel & Power 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Sikekline 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 20 Mad Circulation System 21 Mud Logging 22 Logging, Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation Flowback & Disp 28 Mud / Wastewater Disposal 28 Might Spervision Feightering 29 Might Spervision Feightering 20 Drilling Graphison Feightering 20 Drilling Graphison Feightering 21 Drilling Graphison Feightering 22 Drilling Graphison Feightering 23 Drilling Graphison Feightering 24 Drilling Liner 26 Total Interest Graphison 26 Drilling Graphison 26 Tranks 26 Production Liner 26 Tubing 26 Production Liner 26 Tubing 27 Artificial Lift Equipment 27 Compressor 28 Installation Costs 27 Restatement & Meter Installation 28 Gathering, Bulk Lines 29 Tanks / Feditily Containment 38 Flare Stack 48 Electrical / Grounding 38 Communications / ScADA 36 Instrumentation / Safety Drilling Engineer: 28 PARED BY Permian Resources Ope Drilling Engineer: Completions E		753,820 100,176 188,933 243,296 	725,061 393,136 123,274 146,484	15,000	429,543 753,820 100,176 913,996 243,296 15,000 393,136
11 Drilling 12 Drill Bits 13 Faul & Power 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Slickline 16 Perforating, Wireline, Slickline 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 20 Mad Circulation System 21 Mud Logging 22 Logging, Promation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation 25 Stimulation 25 Stimulation Flowback & Disp 28 Mud / Wastewater Disposal 30 Rig Supervision / Engineering 25 Stimulation 25 Stimulation 25 Stimulation 26 Stimulation 26 Stimulation 27 Stimulation 28 Mud / Wastewater Disposal 30 Rig Supervision / Engineering 37 Ing & Completion Overhead 31 Labor 49 Proppant 39 Insurance 39 Plugging & Abandonment TOTAL II TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 66 Wellhead 67 Packers, Liner Hangers 66 Tanks 69 Production Casing 66 Wellhead 67 Packers, Liner Hangers 66 Tanks 69 Production Liner 76 Flow Lines 77 Rod string 78 Commission 79 Flow Clines 71 Red string 79 Commission 70 Commission 70 Gas Conditioning, Perhydration 70 Gas Conditioning, Facility Pling 80 Gathering, Facility Containment 83 Flare Stack 84 Electrical Grounding 85 Communications, SCADA 86 Instrumentation / Safety TOTAL TOT		753,820 100,176 188,933 243,296 	393,136 123,274 146,484	15,000	753,820 100,176 913,996 243,296 15,000 393,136
12 Drill Bis 13 Field & Power 14 Cementing & Float Equip 15 Cementing & Float Equip 16 Cementing & Float Equip 16 Cementing & Float Equip 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 18 Completion Unit, Swab, CTU 20 Mad Circulation System 21 Mud Logging 22 Logging, Formation Evaluation 23 Mud & Chemicals 23 Water 25 Stimulation Flowback & Disp 25 Stimulation 25 Stimulation Flowback & Disp 25 Mud / Wastewater Disposal 30 Rig Supervision / Engineering 32 Drig & Completion Overhead 31 Labor 34 Proppant 59 Insurance 97 Contingency 99 Plugging & Abandonment TOTAL II TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Inding Liner 63 Production Liner 64 Totals 64 Production Liner 65 Tubing 66 Verilhead 67 Packern, Liner Hangers 66 Tanks 69 Production Usesels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Downhole Pumps 77 Desseroment & Meter Installation 78 Gas Conditioning / Dehydration 79 Gas Conditioning / Dehydration 79 Gas Conditioning / Bulk Lines 81 Yalves, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / ScADA 66 Instrumentation / Safety Drilling Engineer: Completions Engineer: MPCOMPILION Completions Engineer:		103,176 188,935 243,296 103,209 17,529 7,270 361,835	393,136 123,274 146,484	15,000	100,176 913,996 243,296 15,000 393,136
13 Faci & Power 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Sikkhlue 17 High Pressure Pamp Truck 18 Completion Unit, Swab, CTU 20 Mad Circulation System 21 Mud Logding 21 Mud Logding 22 Logging, Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation 25 Stimulation Flowback & Disp 28 Mud/ Wastewater Disposal 30 Rig Sopervision / Engineering 25 Stimulation 25 Stimulation 25 Stimulation 25 Stimulation 26 Sundy Authority 27 Stimulation 26 Mud/ Wastewater Disposal 30 Rig Sopervision / Engineering 30 Rig Sopervision / Engineering 31 Rig Sopervision / Engineering 32 Drig & Completion Overhead 33 Labor 45 Propant 39 Insurance 99 Plugging & Abandonment TANGIBLE COSTS 66 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 66 Wellhead 67 Packers, Liner Hangers 66 Tanks 66 Production User 67 Flow Lines 77 Rod String 78 Installation Costs 78 Surface Pumps 79 Downhole Pumps 77 Measurement & Meter installation 78 Gas Conditioning, Dehydration 79 Gas Conditioning, Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack 84 Electrical Grounding 85 Communications / Sacha 86 Instrumentation / Safety TOTA TOTAL		188,935 243,296 	393,136 123,274 146,484	15,000	913,996 243,296 15,000 393,136
14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Sikekline 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 20 Mad Circulation System 21 Mud Cogging 21 Logging, Formation Evaluation 23 Mud & Chemicals 23 Water 25 Stimulation 26 Stimulation 26 Stimulation 26 Stimulation 26 Stimulation 27 Stimulation 28 Mud / Wastewater Disposal 20 Rig Supervision / Engineering 20 Truck 20 Stimulation 20 Stimulati		243,296 105,209 17,529 7,270 361,835	393,136 123,274 146,484		243,296 15,000 393,136
15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Sikkline 17 High Pressure Pamp Truck 18 Completion Unit, Swab, CTU 20 Mad Circulation System 21 Mad Logging 21 Mad Logging 22 Logging, Formation Evaluation 23 Mad & Chemicals 23 Water 25 Stimulation Evaluation 23 Mad & Chemicals 25 Mad Wastewater Disposal 30 Rig Supervision / Engineering 25 Drig & Completion Overhead 35 Labor 45 Proppant 59 Insurance 77 Contingency 99 Plugging & Abandonment TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Casing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Liner 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Measurement & Meter Installation 75 Gas Conditioning, Dehydration 79 Gas Conditioning, Dehydration 79 Gas Conditioning, Pothydration 79 Gas Conditioning, Eadilty Plying 80 Gathering, Bulk Lines 81 Valves, Dumps, Controllers 82 Tank, Facility Containment 83 Hare Stack 84 Electrical / Grounding 85 Communications / ScADA 66 Instrumentation / Safety TOTA TOTAL TOTA		105,209 17,529 7,270 361,835	123,274		393,136
23 Mud & Chemicals 24 Water 25 Stimulation 25 Stimulation Flowback & Disp 28 Mud/Watervater Disposal 30 Rig Supervision / Engineering 22 Drig & Completion Overhead 33 Labor 45 Proppant 95 Insurance 97 Contingency 99 Plugging & Abandonment TOTAL II TANGIBLE COSTS 66 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 64 Production Casing 66 Wellhead 67 Packers, Liner Hangers 66 Tanks 66 Production User 57 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Dovembole Pumps 75 Dovembole Pumps 76 Dovembole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning, Dehydration 79 Gas Conditioning, Dehydration 79 Gas Conditioning, Dehydration 78 Gas Conditioning, Dehydration 78 Gas Conditioning, Dehydration 78 Gas Conditioning, Dehydration 78 Gas Conditioning, October Strates 85 Hare Stack 84 Electrical / Grounding 85 Communications / Safety TOTA TOTAL TO		105,209 17,529 7,270 361,835	123,274		
18 Completion Unit, Swab, CTU 20 Mad Circulation System 21 Mud Logging 22 Mud Circulation System 23 Mud & Chemicals 24 Water 25 Stimulation 26 Suppose 27 Condingency 28 Condition 28 Totals 29 Totals 20 Total 21 Total 21 Total 22 Totals 23 Totals 24 Totals 25 Completions Engineer: 26 Completions Engineer: 27 Completions Engineer: 28 Totals 28 Totals 29 Totals 20 Total		105,209 17,529 7,270 361,835	146,484		
20 Mad Circulation System 21 Mad Logging 22 Logging 7 Formation Evaluation 23 Mad & Chemicals 24 Water 25 Stimulation 23 Mad & Chemicals 24 Water 25 Stimulation Flowback & Disp 28 Mad / Waterwater Disposal 30 Rig Supervision / Engineering 22 Drig & Completion Overhead 35 Labor 45 Proppant 95 Insurance 97 Contingency 99 Plugging & Abandonment TOTAL II TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Illner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Department 65 Tubing 68 Tubing 61 Production Costing 75 Newsparene 16 Meter Installation 78 Gas Conditioning / Depydration 79 Interconnecting Facility Piping 80 Gatherlang Bulk Lines 81 Valves, Dumps, Controllers 25 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / Sach Distrumentation / Safety 10 Department		17,529 7,270 361,835		-	123,274
21 Mud Logging 22 Logging/Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation Flowback & Disp 25 Stimulation Flowback & Disp 25 Mud / Waterwater Disposal 30 Rig Supervision / Engineering 25 Proposal 30 Rig Supervision / Engineering 25 Drig & Completion Overhead 35 Labor 45 Proppant 55 Insurance 57 Contingency 59 Plugging & Abandonment TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Linee 63 Production Casing 64 Production Casing 64 Production Casing 65 Tubling 66 Tanks 69 Production User 66 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning/ Dehydration 79 Gas Conditioning/ Dehydration 79 Gas Conditioning/ Dehydration 79 Gas Conditioning/ Dehydration 79 Gas Conditioning/ Dehydration 78 Gas Conditioning/ Dehydration 78 Gas Conditioning/ ScADA 60 Instrumentation / Safety EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: Completi		17,529 7,270 361,835			146,484
22 Logging, Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation 26 Stimulation 26 Stimulation 26 Stimulation 26 Stimulation 27 Stimulation 28 Mud / Wastewater Disposal 30 Rig Supervision / Engineering 32 Drig & Completion Overhead 33 Labor 54 Proppant 55 Insurance 97 Contingency 99 Plugging & Abandonment TOTAL II TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Individual Casing 63 Production Casing 64 Production Liner 65 Tubling 66 Verified Horizon 65 Tubling 66 Verified 67 Packers, Liner Hangers 66 Tanks 69 Production Vessels 70 Flow Lines 77 Rod string 77 Artificial Lift Equipment 78 Compressor 78 Installation Costs 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Gas Conditioning / Dehydration 79 Gas Conditioning / Dehydration 79 Liner Consenting Facility Centainment 85 Flare Stack 84 Electrical / Grounding 85 Communications / ScADA 86 Instrumentation / Safety Drilling Engineer: Completions Engineer: Co		7,270 361,835			105,209 17,529
23 Mud & Chemicals 24 Water 25 Stimulation 25 Stimulation Flowback & Disp 25 Mud/ Wastewater Disposal 30 Rig Sepervision / Engineering 32 Drig & Completion Overhead 33 Labor 54 Proppant 59 Insurance 79 Plunging & Abandonment TOTAL II TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 64 Production Casing 65 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production User 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Casing 77 Plow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Downhole Pumps 75 Downhole Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning, Dehydration 79 Gas Conditioning, Dehydration 79 Gas Conditioning, Dehydration 79 Gas Conditioning, Dehydration 78 Gas Conditioning, Dehydration 79 Gas Conditioning, SCADA 66 Instrumentation / Safety TOTAL EPARED BY Permian Resources Ope Drilling Engineer: Completions		361,835	8,339		15,609
24 Water 25 Stimulation 26 Stimulation 26 Stimulation 26 Stimulation 26 Stimulation 26 Stimulation 27 Stimulation 28 Insurance 30 Rig Supervision / Engineering 31 Drig & Completion Overhead 33 Labor 34 Proppant 35 Insurance 97 Contingency 99 Pluggling & Abandonment TOTAL II TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Inter 63 Production Liner 64 Production Liner 65 Tubling 66 Wellhead 67 Packers, Liner Hangers 65 Tubling 66 Wellhead 67 Packers, Liner Hangers 67 Tanks 69 Production Vessels 70 Flow Lines 71 Red string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pamps 75 Downhole Pumps 77 Deswindering Scillity Plping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Flane Stack 84 Electrical / Grounding 85 Communications / ScADA 86 Instrumentation / Safety TOTAL			438,185	10,000	810,020
25 Stimulation 25 Stimulation Flowback & Disp 28 Mud / Wastewater Disposal 30 Rig Sopervision / Engineering 32 Drig & Completion Overhead 33 Labor 54 Proppant 55 Insurance 79 Plugging & Abandonment TOTAL II TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 64 Production Casing 65 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Downhole Pumps 75 Downhole Pumps 76 Downhole Pumps 77 Desarrance Affect Installation 78 Gas Conditioning / Dehydration 79 Gas Conditioning / Dehydration 78 Gas Conditioning SCADA 66 Instrumentation / Safety 75 Completions Engineer: 75 Completions Engineer: 76 Department Resources Ope 77 Deriving Engineer: 77 Department Production Engineer: 78 Department Production Engineer: 79 Department Production Engineer: 70 Department Production Engineer: 71 Department Production Engineer: 72 Department Production Engineer: 73 Department Production Engineer: 74 Department Production Engineer: 75 Department Production Engineer: 75 Department Production Production Engineer: 76 Department Production Production Engineer: 76 Department Production Production Production Production Production Productio			661,625	300,000	1,005,083
23 Mud / Wastewater Disposal 30 Rig Supervision / Engineering 32 Drig & Completion Overhead 33 Labor 54 Proppant 59 Insurance 79 Plugging & Abandonment TOTAL II TOTA			814,033		814,033
30 Rig Sepervision / Engineering 22 Drig & Completion Overhead 33 Labor 54 Proppant 54 Proppant 59 Proppant TOTAL II TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Drilling Liner 65 Production Casing 65 Production Liner 65 Tubing 65 Tubing 65 Tubing 65 Tubing 67 Packers, Liner Hangers 65 Tubing 67 Packers, Liner Hangers 65 Tubing 76 Plow Lines 77 Plow Lines 77 Rod string 78 Compressor 78 Installation Costs 78 Compressor 78 Installation Costs 79 Tubing 80 Cathering Facility Plping 80 Cathering Facility Plping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Plares Stack 84 Electrical / Grounding 85 Communications / ScADA 86 Instrumentation / Safety TOTAL T			121,606	150,000	271,606
32 Drig & Completion Overhead 33 Labor 54 Proppant 95 Insurance 97 Contingency 99 Plugging & Abandonment TANGIBLE COSTS 66 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Usiner 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 73 Faviare Pumps 74 Measurement & Meter Installation 75 Gar Conditioning/ Dehydration 79 Gas Conditioning/ Dehydration 79 Gas Conditioning/ Dehydration 79 Intervonsecting Facility Plying 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controllers 82 Tank/ Facility Containment 83 Flare Stack 84 Electrical/ Grounding 85 Communications/ SACDA 86 Instrumentation/ Safety TOTA TEPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: Completions Engineer:		193,104	61,151		254,254
35 Labor 56 Proppant 59 Insurance 77 Contingency 59 Plugging & Abandonment TOTAL II TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 61 Intermediate Casing 62 Drilling Liner 65 Tubling 64 Production Casing 64 Production Casing 64 Production Liner 65 Tubling 65 Wellhead 67 Packers, Liner Hangers 65 Tubling 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pump 77 Downhole Pump 78 Cas Conditioning, Dehydration 79 Gas Conditioning, Dehydration 79 Gas Conditioning, Dehydration 79 Linteronnecting Facility Plping 80 Gathering, Bulk Lines 81 Yalve, Dumps, Controllers 82 Tank/ Facility Containment 83 Flare Stack 84 Electrical/ Grounding 85 Communications/ SaCADA 86 Instrumentation/ Safety TOTAL EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: Comple		121,196	133,420	21,667	276,283
54 Proppant 59 Insurance 97 Contingency 99 Plugging & Abandonment TOTAL II TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 61 Intermediate Casing 61 Intermediate Casing 61 Production Liner 65 Tubing 66 Wellhead 67 Prackers, Liner Hangers 65 Tanks 66 Vellhead 67 Packers, Liner Hangers 68 Tanks 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter installation 79 Interconnecting Recility Piping 80 Catherlang, Palk Lines 81 Valves, Dumps, Controllers 81 Valves, Dumps, Controllers 83 Flars Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Resources Ope Polilling Engineer: Meter Palageners Completions Engineer: Meter Palageners		10,423	69,489	101,667	10,423 324,514
95 Insurance 97 Contingency 99 Plugging & Abandonment TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 65 Wellhead 67 Packers, Liner Hangers 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 69 Production Users 69 Production Vessels 79 Plow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 71 Rod string 73 Compressor 74 Downhole Pumps 75 Downhole Pumps 75 Downhole Pumps 75 Downhole Pumps 76 Downhole Pumps 77 Description Costs 78 Surface Pumps 70 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning, Dehydration 79 Gas Conditioning, Dehydration 80 Gathering, Bulk Lines 81 Valves, Dumps, Controllers 82 Tank, Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / Safety TOTA EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: Production Engineer: Downhole Production Engineer: Downho		153,358	1,255,227	101,667	1,255,227
97 Contingency 99 Flugging & Abandonment TOTAL II TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling inter 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 65 Tubing 77 Rod string 72 Artificial Lift Equipment 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pamps 76 Downhole Pumps 77 Downhole Pumps 78 Gas Conditioning / Dehydration 79 Gas Conditioning / Dehydration 79 Gas Conditioning / Dehydration 79 Gas Conditioning / Dehydration 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety TOTAL TEPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer:		14,660	-		14,660
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 65 Wellhead 67 Packers, Liner Hangers 65 Tabling 66 Wellhead 67 Packers, Liner Hangers 65 Tabling 66 Wellhead 67 Packers, Liner Hangers 65 Tabling 67 Pout Lines 77 Rod string 78 Casing Casing 78 Casing 78 Casing 78 Casing 78 Casing 79 Casing 70 Downhole Pumps 70 Downhole Pumps 70 Downhole Pumps 70 Downhole Pumps 70 Lines 71 Rads Casing 78 Casing 7			24,421	3,833	28,254
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 64 Production Casing 65 Wellhead 67 Packers, Liner Hangers 65 Talnis 65 Wellhead 67 Packers, Liner Hangers 65 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 71 Rod string 72 Artificial Lift Equipment 73 Compressor 73 Linestal Lift Equipment 73 Compressor 75 Surface Pumps 77 Messurement & Meter Installation 78 Gas Conditioning/ Dehydration 79 Gas Conditioning/ Dehydration 79 Interconnecting Facility Piping 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controllers 82 Tank/ Facility Containment 83 Flare Stack 64 Electrical/ Grounding 85 Communications/ SCADA 86 Instrumentation/ Safety TOTA EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: Completions Engineer: Descriptions Production Engineer: Descriptions					-
69 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 65 Production Liner 65 Tubling 65 Wellhead 67 Packers, Liner Hangers 65 Tubling 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pamps 75 Downhole Pumps 76 Downhole Pumps 77 Downhole Pumps 78 Cas Conditioning, Dehydration 78 Gas Conditioning, Dehydration 78 Gas Conditioning, Dehydration 78 Gas Conditioning, Dehydration 78 Gas Conditioning, Schala 81 Flarer Stack 82 Tank / Facility Containment 83 Flarer Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety TOTA TOTA TOTA TOTA TOTA TOTA Production Engineer: Completions	INTANGIBLES >	3,516,419	5,367,000	772,167	9,655,585
69 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 65 Production Liner 65 Tubling 65 Wellhead 67 Packers, Liner Hangers 65 Tubling 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pamps 75 Downhole Pumps 76 Downhole Pumps 77 Downhole Pumps 78 Cas Conditioning, Dehydration 78 Gas Conditioning, Dehydration 78 Gas Conditioning, Dehydration 78 Gas Conditioning, Dehydration 78 Gas Conditioning, Schala 81 Flarer Stack 82 Tank / Facility Containment 83 Flarer Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety TOTA TOTA TOTA TOTA TOTA TOTA Production Engineer: Completions		DRILLING	COMPLETION	PRODUCTION	TOTAL
69 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 65 Production Liner 65 Tubbing 66 Wellhead 67 Packers, Liner Hangers 65 Tubbing 66 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Downhole Pumps 78 Downhole Pumps 79 Downhole Pumps 79 Lineronacting Recility Plping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety TOTA TOTA TOTA TOTA TOTA TOTA TOTA TOTA Production Engineer: Completions Engineer: Com		COSTS	COSTS	COSTS	COSTS
61 Intermediate Casing 62 Drilling Liner 63 Production Liner 63 Production Liner 65 Tobling 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 73 Expressor 74 Installation Costs 75 Surface Pamps 75 Messavement & Meter Installation 79 Interconnecting Facility Piping 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controllers 82 Tank/ Facility Containment 83 Hare Stack 84 Electrical/ Grounding 85 Communications/ Safety TOTA TOTA EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: Completions Engineer: Diving Production Engineer: Completions Engineer	5	122,234			S 122,234
63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Tackers, Liner Hangers 68 Tanks 69 Production Vessels 79 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 73 Euritain Costs 75 Surface Pumps 75 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Intervenecting Facility Piping 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Tank / Facility Containment 83 Tank / Facility Containment 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety TOTA EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: MR		344,284			344,284
64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tubing 68 Wellhead 67 Packers, Liner Hangers 69 Production Vessels 79 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Downhole Pumps 79 Coownhole Pumps 79 Cost Conditioning, Dehydration 79 Gas Conditioning, Dehydration 79 Gas Conditioning, Dehydration 79 Gas Conditioning, Bulk Lines 81 Valves, Dumps, Controllers 82 Tank/ Facility Containment 83 Tank/ Facility Containment 83 Tank/ Facility Containment 85 Tanc Stack 84 Electrical / Grounding 85 Communications / SADA 86 Instrumentation / Safety TOTA TOTA EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: Completions Engineer: Drilling Engineer: Completions Engineer: Descriptions Compressions Production Engineer: Descriptions Compressions Descriptions Descriptions Compressions Descriptions Descr		-			207 626
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 68 Tanks 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pamps 75 Downhole Pumps 75 Downhole Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Gas Conditioning / Dehydration 79 Linterconsecting Recility Piping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 81 Valves, Dumps, Controllers 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Resources Ope Drilling Engineer: Completions		687,039		- _	687,039
66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 79 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 75 Earth Flow Plants 75 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Gas Conditioning / Dehydration 79 Gas Conditioning / Dehydration 79 Gas Conditioning Facility Plying 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank/ Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / SACDA 86 Instrumentation / Safety TOTA TOTA EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: Completions Engineer: Drilling Engineer: Completions Engineer: Drilling Engine				140,000	140,000
67 Packers, Liner Hangers 65 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps 75 Downhole Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Gas Conditioning / Dehydration 79 Linerconnecting Facility Piping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 81 Valves, Dumps, Controllers 83 Flanc Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety TOTAL TEPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: Completions Engineer: Drilling Engineer: Completions Engineer: Completions Engineer: Double Completions Engineer: Completion		64,820		40,000	104,820
68 Tanks 69 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string, 71 Rod string, 72 Artificial Lift Equipment 73 Compressor 73 Surface Pamps 75 Markace Pamps 76 Measurement & Meter Installation 79 Gas Conditioning / Devlydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety TOTA TOTA EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: Mr. Production Engineer: Drilling Engineer: Completions Engineer: Drilling Engineer: Dr		14,732		20,000	34,732
79 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 73 Endrage 74 Artificial Lift Equipment 75 Compressor 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 79 Interconnecting Facility Piping 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controllers 82 Tank/ Facility Containment 83 Flare Stack 84 Electrical/ Grounding 85 Communications/ SCADA 86 Instrumentation / Safety TOTA T EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: MR				45,833	45,833
71 Rod string. 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Yamps 75 Downhole Pumps 76 Downhole Pump 77 Measurement & Meter Installation 78 Gas Conditioning, Dehydration 79 Gas Conditioning, Dehydration 79 Interconnecting Recility Pliping 80 Gathering, Bulk Lines 81 Valves, Dumps, Controllers 82 Tank/ Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications/ SADA 86 Instrumentation/ Safety TOTA TOTA EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: M				126,667	126,667
72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Fumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Recility Piping 80 Gathering / Bulk Lines 81 Valves , Dumps, Controllers 82 Tank / Facility Containment 83 Tans Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety TOTA T EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: MR				66,667	66,667
73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Downhole Pumps 77 Measurement & Meter installation 78 Gas Conditioning / Dehydration 79 Gas Conditioning / Dehydration 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controllers 82 Tank/ Facility Containment 83 Tane Stack 84 Electrical / Grounding 83 Communications / SCADA 86 Instrumentation / Safety TOTA TOTA EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: M					
74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 76 Downhole Pumps 77 Meassurement & Metter installation 79 Interconnecting Facility Piping 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controllers 82 Tank/ Facility Containment 83 Flare Stack 84 Electrical/ Crounding 84 Electrical/ Grounding 85 Communications/ SCADA 86 Instrumentation/ Safety TOTA TOTA EPPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: MR			<u>-</u>	90,000	90,000
75 Surface Pamps 75 Downhole Pumps 77 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Gas Conditioning / Dehydration 79 Gas Conditioning Facility Plying 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank/ Facility Containment 83 Tane Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety TOTA TOTA EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: Mreduction Engineer: Drilling Engineer: Completions Engineer: Drilling Engineer: Drilli				5,833	5,833
76 Downhole Pumps 77 Measarement & Meter Installation 78 Gas Conditioning/ Dehydration 79 Interconnecting Eacility Piping 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controllers 82 Tank/ Facility Containment 83 Flare Stack 84 Electrical / Grounding 84 Electrical / Grounding 85 Communications/ SCADA 86 Instrumentation / Safety TOTA EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: MR				41467	
77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering/Bulk Lines 81 Valves, Dumps, Controllers 82 Tank/ Facility Containment 83 Hars Stack 84 Electrical/ Grounding 85 Communications/ SCADA 86 Instrumentation/ Safety TOTA T EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: M Production Engineer: Do				61,667	61,667
78 Gas Conditioning / Dehydration 79 Gas Conditioning Seility Plping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack 94 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety TOTA T EPARED BY Permian Resources Ope Drilling Engineer: PS Completions Engineer: M Production Engineer: Do				116,667	116,667
79 Interconnecting Facility Piping 80 Gathering Bulk Lines 81 Valves, Dumps, Controllers 82 Tank/ Facility Containment 83 Hare Stack 84 Electrical/ Grounding 85 Communications/ SCADA 86 Instrumentation / Safety TOTA TOTA EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: MR Production Engineer: Dotal				110,007	
80 Gathering/Bulk Lines 81 Valves, Dumps, Controllers 82 Tank/ Facility Containment 83 Tank/ Facility Containment 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety TOTA TEPARED BY Permian Resources Ope Drilling Engineer: PS Completions Engineer: MR Production Engineer: Do				20,000	20,000
81 Valves, Dumps, Controllers 82 Tank / Feclity Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety TOTA TOTA EPARED BY Permian Resources Ope Drilling Engineer: Mr. Completions Engineer: Mr. Production Engineer: Dot					
83 Flare Stack 46 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety TOTAL T EPARED BY Permian Resources Ope Drilling Engineer: Completions Engineer: Mr. Production Engineer: Drilling Engineer: Mr. Production Engineer: Drilling Eng			-	108,333	108,333
84 Electrical/ Grounding 85 Communications / SCADA 86 Instrumentation / Safety TOTAL T EPARED BY Permian Resources Open Drilling Engineer: PR Completions Engineer: MR Production Engineer: DX				43,333	43,333
88 Communications / SCADA 86 Instrumentation / Safety TOTAL T EPARED BY Permian Resources Ope Drilling Engineer: PS Completions Engineer: MI Production Engineer: DX				16,667	16,667
TOTA TOTA EPARED BY Permian Resources Ope Drilling Engineer: Production Engineer: MI Production Engineer: DX		`		50,000 36,667	50,000 36,667
EPARED BY Permian Resources Ope Drilling Engineer: PS Completions Engineer: M Production Engineer: DX				833	833
TEPARED BY Permian Resources Ope Drilling Engineer: PS Completions Engineer: MI Production Engineer: DX	AL TANGIBLES >	1,233,109		989,167	2,222,276
EPARED BY Permian Resources Ope Drilling Engineer: PS Completions Engineer: Mi Production Engineer: DX	TOTAL COSTS >		5,367,000	1,761,334	11,877,862
Drilling Engineer: PS Completions Engineer: MI Production Engineer: DO		1,1 - 7,140	3,000	-,744,475	
Drilling Engineer: PS Completions Engineer: MI Production Engineer: DO	perating, LLC:				
Completions Engineer: MI Production Engineer: DO					
Production Engineer: DO					[
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untan Resources Operating, LLC API					
Co-CEO	PPROVAL:	Co-C	CEO .	VP - Opera	ations
	PPROVAL:			71 - Open	CRM
VP - Land & Legal		VP - Geoscier	,		-
	PPROVAL:	VI - Geoscier	50		I
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	wн				
LI ODER ATTALO DA TENERA A TEN	wн				
N OPERATING PARTNER APPRO	WH BG				 1
Company Name:	WH BG		Working Interest (%):	T	ax ID:
	WH BG				
Signed by:	WH BG			_	EXHIB
Title;	WH BG		Date:	☐ Yes	□ No (I
on this AFE are extrusion soft and more not be construed as critican as	WH BG		Approval:		ng dan AFE, the Fasteripus

Permian Resources Operating, LLC 300 N. Marienfeld St., Stc. 1000 Midland, TX 79701 Phone (432) 695-4022 • Fax (432) 695-4063

		F COSTS AND AUTHO			
-	2.17.2023			AFE NO.:	1
	Bane 4-9 Federal Com 20:	2H		FIELD:	Tonto; Wolfcamp
	Section 4, T20S-R34E			MD/TVD:	21,210' / 10,925'
COUNTY/STATE:	Lea County, New Mexico	<u> </u>		LATERAL LENGTH:	10,000
Permian WI:				DRILLING DAYS:	19.6
	WCXY			COMPLETION DAYS:	19
	Drill a horizontal WCXY AL install cost	well and complete wit	th 44 stages. AFE include	s drilling, completions,	Nowback and Initial
	-				
INTANGIBLE C	nere	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 Land/Legal/Regulatory	5	59,066		37,500	5 96,566
2 Location, Surveys & Damage	• ·	288,079	18,067	2,500	308,647
4 Freight/Transportation	•	47,628	43,778	25,000	116,406
5 Rental - Surface Equipment		124,327	215,417	105,000	444,744
6 Rental - Downhole Equipme	ni	205,424	59,805		265,229
7 Rental - Living Quarters		48,083 429,543	54,480		102,562 429,543
10 Directional Drilling, Survey 11 Drilling		753,820			753,820
12 Drill Bits	,	100,176			100,176
13 Fuel & Power	•	188,935	725,061		913,996
14 Cementing & Float Equip		243,296			243,296
15 Completion Unit, Swab, CT				15,000	15,000
16 Perforating, Wireline, Slick	U ne		393,136 123,274		393,136 123,274
17 High Pressure Pump Truck		<u>:</u>	146,484		146,484
18 Completion Unit, Swab, CT 20 Mud Circulation System	•	105,209	- 140,104		105,209
21 Mud Logging		17,529	-	-	17,529
22 Logging/Formation Evalua	tion	7,270	8,339		15,609
23 Mud & Chemicals		361,835	438,185	10,000	810,020
24 Water		43,459	661,625	300,000	1,005,083
25 Stimulation			814,033	150,000	814,033 271,606
26 Stimulation Flowback & Di		193,104	121,606	150,000	254,254
28 Mud / Wastewater Disposal 30 Rig Supervision / Engineeri		121,196	133,420	21,667	276,283
32 Drig & Completion Overhe		10,423	155/120		10,423
35 Labor		153,358	69,489	101,667	324,514
54 Proppant			1,255,227	-	1,255,227
95 Insurance		14,660			14,660
97 Contingency			24,421	3,833	28,254
99 Plugging & Abandonment	TOTAL INTANGIBLES >	3,516,419	5,367,000	772,167	9,655,585
	TOTALINIANGIDELS	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE CO	STS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing	\$	122,234			\$ 122,234
61 Intermediate Casing		344,284			344,284
62 Drilling Liner					- 707 010
63 Production Casing		687,039			687,039
64 Production Liner 65 Tubing				140,000	140,000
66 Wellhead		64,820		40,000	104,820
67 Packers, Liner Hangers		14,732	•	20,000	34,732
68 Tanks			-	45,833	45,833
69 Production Vessels				126,667	126,667
70 Flow Lines		<u>·</u> _		66,667	66,667
71 Rod string 72 Artificial Lift Equipment				90,000	90.000
73 Compressor				5,833	5,833
74 Installation Costs					-
75 Surface Pumps			-	61,667	61,667
76 Downhole Pumps					
77 Measurement & Meter Inst		<u> </u>		116,667	116,667
78 Gas Conditioning / Dehyda		<u>·</u>		20,600	20,000
79 Interconnecting Facility Pip 80 Gathering / Bulk Lines	oung			20,000	20,000
81 Valves, Dumps, Controller				108,333	108,333
82 Tank / Facility Containmen				43,333	43,333
83 Flare Stack				16,667	16,667
84 Electrical/Grounding				50,000	50,000
85 Communications/SCADA		<u> </u>	<u> </u>	36,667	36,667
86 Instrumentation / Safety	TOTAL TANCINGS	1 533 500	- 0	989,167	2,222,276
_	TOTAL TANGIBLES > TOTAL COSTS >		5,367,000	1,761,334	11,877,862
	TOTAL COSTS >	4,147,320	3,501,000	1,701,031	11,017,002
EPARED BY Permian Reso	urces Operating, LLC:				
Drilling Engineer:	P5				
Completions Engineer.	ML				
Production Engineer.	DC				
		·			
mian Resources Operating	LLC APPROVAL:				
Co-CEO		Co-C		VP - Oper	
VP - Land & Legal	WH	VP - Geoscier	JW		CRM
·	BG		50		
ON OPERATING PARTNE	R APPROVAL:				
			Manager to 1995	_	TD:
			Working Interest (%):	Т	ax ID:
Company Name:			" · · · · · · · · · · · · · · · · · · ·		
Company Name: Signed by:			Date:		
			Date:] Yes	── No (mark one)

Permian Resources Operating, LLC 300 N. Marienfeld St., Str. 1000 Midland, TX 79701 Phone (432) 695-4222 • Fax (432) 695-4063

	2.17.2023 Bane 4-9 Federal Com 2	03H		AFE NO.:_ FIELD:	1 Tonto; Wolfcamp
	Section 4, T20S-R34E			MD/TVD:	21,210' / 10,925'
	Lea County, New Mexic	30		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
	WCXY			COMPLETION DAYS:	19
		Y well and complete wi	ith 44 stages. AFE includ	les drilling, completions,	
REMARKS:	AL install cost				
		DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
INTANGIBLE C	OSTS	5 59,066	C0313	37,500	5 96,566
Land / Legal / Regulatory Location, Surveys & Damage		288,079	18,067	2,500	308,642
l Freight / Transportation		47,628	43,778	25,000	116,406
Rental - Surface Equipment		124,327	215,417	105,800	444,744
i Rental - Downhole Equipme	nt	205,424	59,805		265,22
Rental - Living Quarters		48,083	54,480		102,56
O Directional Drilling, Surve	rs .	429,543		====	429,54
1 Drilling		753,820	<u> </u>		753,82
2 Drill Bits		100,176	-	<u>·</u>	100,170
3 Fuel & Power		188,935	725,061		
4 Cementing & Float Equip	.,	243,296		15,000	243,29 15,00
5 Completion Unit, Swab, CT			393,136	17,000	393,13
6 Perforating, Wireline, Slick 7 High Pressure Pump Truck			123,274	:	123,27
8 Completion Unit, Swab, CT			146,484		146,48
to Mud Circulation System	•	105,209			105,20
1 Mud Logging		17,529			17,52
2 Logging/Formation Evalua	tion	7,270	8,339	-	15,60
3 Mud & Chemicals		361,835	438,185	10,000	810,02
14 Water		43,459	661,625	300,000	1,005,08
15 Stimulation			814,033		814,03
6 Stimulation Flowback & Di			121,606	150,000	271.60
28 Mud/Wastewater Disposal		193,104	61,151		254,25
30 Rlg Supervision / Engineer		121,196	133,420	21,667	276,28
32 Drlg & Completion Overhe	acı	153,358	69,489	101,667	10,42 324,51
35 Labor		153,358	1,255,227	101,067	1,255,22
54 Proppant 95 Insurance		14,660	1,23,5227		14,66
95 Insurance 97 Contingency			24,421	3,833	28,25
99 Plugging & Abandonment					
	TOTAL INTANGIBLES	> 3,516,419	5,367,000	772,167	9,655,50
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE CO	STS	COSTS	COSTS	COSTS	COSTS
0 Surface Casing		\$ 122,234			5 122,23
il Intermediate Casing		344,284		<u> </u>	344,28
62 Drilling Liner		407.030			687,03
63 Production Casing 64 Production Liner		687,039			607,03
		<u> </u>		140,000	140,00
65 Tubing 66 Wellhead		64,820		40,000	104,82
67 Packers, Liner Hangers		14,732		20,000	34,73
68 Tanks		- 14,752		45,833	45,83
69 Production Vessels				126,667	126,66
70 Flow Lines				66,667	66,66
71 Rod string					
72 Artificial Lift Equipment				90,000	90,00
73 Compressor			-	5,833	5,83
74 Installation Costs		-			-
75 Surface Pumps				61,667	61,66
76 Downhole Pumps					
77 Measurement & Meter Inst		<u> </u>	<u>-</u>	116,667	116,66
78 Gas Conditioning / Dehyd		-		-	
79 Interconnecting Facility Pip	ping			20,000	20,00
30 Gathering / Bulk Lines		====		100 333	108,33
81 Valves, Dumps, Controller				108,333	43,33
82 Tank / Facility Containmer 83 Flare Stack	ı			16.667	16,66
83 Flare Stack 84 Electrical/Grounding		<u>:</u>		50,000	50.00
85 Communications / SCADA				36,667	36,66
86 Instrumentation / Safety				833	83
	TOTAL TANGIBLES	> 1,233,109		989,167	2,222,27
	TOTAL COSTS		5,367,000	1,761,334	11,877,86
				<u> </u>	
PARED BY Permian Reso	urces Operating, LLC:				
Drilling Engineer.	P5				
Completions Engineer:	ML				
Production Engineer:	DC				
nian Resources Operating	II.C ADDDOUAL.				
		-			
Co-CEO		Co-4	CEO	VP - Oper	CRM
VP - Land & Legal	BC	VP - Geoscie	nces		
			•~		
JOBER LEWIS TO THE	ABBROWN				
OPERATING PARTNE	CAPPROVAL:				
Company Name:		<u></u>	Working Interest (%):	1	Tax ID:
Signed by:			Date:		
Signed by: Title:			Date: Approval:		── No (mark one)

Permian Resources Operating, LLC 300 N. Marienfeld St., Ste. 1000 Midland, TX 79701 Phone (432) 695-4222 • Fax (432) 695-4063

		UP COSTS AND AUTHO	DRIZATION FOR EXPEND		
DATE:	2.17.2023			AFE NO.:	11
WELL NAME:	Bane 4-9 Federal Com 20	4H		FIELD:	Tonto; Wolfcamp
LOCATION:	Section 4, T20S-R34E			MD/TVD:_	21,210' / 10,925'
COUNTY/STATE:	Lea County, New Mexic	0		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	WCXY			COMPLETION DAYS:	19
	Drill a horizontal WCXY	well and complete wi	th 44 stages. AFE include	drilling, completions,	flowback and Initial
REMARKS:	AL install cost				
INTANGIBLE C	VOETE	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 Land/Legal/Regulatory	.0313			37,500	s 96,5
2 Location, Surveys & Damag	es	288,079	18,067	2,500	308,6
4 Freight / Transportation		47,628	43,778	25,000	116,4
5 Rental - Surface Equipment		124,327	215,417	105,000	444,7
6 Rental - Downhole Equipm	ent	205,424	59,805		265,2
7 Rental - Living Quarters		48,083 429,543	54,480		102,5 429,5
10 Directional Drilling, Surve 11 Drilling	ys	753,820			753,8
12 Drill Bits		100,176			100,1
13 Fuel & Power		188,935	725,061		913,9
14 Cementing & Float Equip		243,296			243,2
15 Completion Unit, Swab, C				15,000	15,0
16 Perforating, Wireline, Slick		<u>·</u>	393,136		393,1
17 High Pressure Pump Truck		<u>·</u>	123,274	<u> </u>	123,2
18 Completion Unit, Swab, C	TU	-	146,484		146,4
20 Mud Circulation System		105,209 17,529	<u> </u>		105,2
21 Mud Logging 22 Logging / Formation Evalu	ation	7,270	8,339		17,5
23 Mud & Chemicals	euvil	361,835	438,185	10,000	810,0
24 Water		43,459	661,625	300,000	1,005,0
25 Stimulation			814,033		814,0
26 Stimulation Flowback & D	lisp		121,606	150,000	271,6
28 Mud/Wastewater Disposa	1	193,104_	61,151		254,2
30 Rig Supervision / Engineer	ring	121,196	133,420	21,667	276,2
32 Drlg & Completion Overh	pad	10,423			10,4
35 Labor		153,358	69,489	101,667	324,5
54 Proppant		14,660	1,255,227		1,255,2
95 Insurance		14,000	24,421	3,833	14,6
97 Contingency 99 Plugging & Abandonment			24,721	3,005	
77 I tugging & Abandolunent	TOTAL INTANGIBLES >		5,367,000	772,167	9,655,
	TOTALINTANGIBLES	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE CO	OSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing	S	122,234			\$ 122,2
61 Intermediate Casing		344,284			344,2
62 Drilling Liner					- 484.5
63 Production Casing		687,039	·		687,0
64 Production Liner 65 Tubing		·	<u>_</u>	140,000	140,0
66 Wellhead		64,820		40,000	104,8
67 Packers, Liner Hangers		14,732		20,000	34,7
68 Tanks				45,833	45,8
69 Production Vessels				126,667	126,6
70 Flow Lines		- ·		66,667	66,6
71 Rod string		<u> </u>	<u>-</u>		
72 Artificial Lift Equipment				90,000	90,0
73 Compressor				5,833	5,8
74 Installation Costs 75 Surface Pumps				61,667	61,6
76 Downhole Pumps					
77 Measurement & Meter Ins	taliation			116,667	116,6
78 Gas Conditioning / Dehyd					
79 Interconnecting Facility Pi				20,000	20,0
80 Gathering/Bulk Lines			•	•	
81 Valves, Dumps, Controller				108,333	108,3
82 Tank / Facility Containment	nt			43,333	43,3
83 Flare Stack			<u>-</u> _	16,667	16,6
84 Electrical / Grounding		<u>-</u>		36,667	50,0 36,6
85 Communications / SCADA 86 Instrumentation / Safety	•	-		833	36,6
so risdumentation, salety	TOTAL TANGIBLES >	1,233,109		989,167	2,222,
	TOTAL COSTS >		5,367,000	1,761,334	11,877,
				-,,	
EPARED BY Permian Resc	urces Operating, LLC:				
Drilling Engineer	: PS				
Completions Engineer					
Production Engineer					
mian Resources Operating	LLC APPROVAL:				
Co-CEC	WH WH	Co-C	TEO	VP - Oper	CRM
VP - Land & Legal		VP - Geoscies	•		-
	BG		50		
N OPERATING PARTNE	R APPROVAL:				
Company Name	· ·		Working Interest (%):	1	ax ID:
			,	·	-
			_		
Signed by			Date:		
• •			Date:	Yes	No (markone

Permian Resources Operating, LLC 300 N. Marlenfeld St., Ste. 1000 Midland, TX 79701 Phone (432) 695-4222 • Fax (432) 695-4063

	,		
TIMATE OF COSTS	AND AUTHORIZ	ZATION FOR	EXPENDITUR

DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com :	201H		FIELD:	Tonto; Wolfcamp
LOCATION:	Section 5, T20S-R34E			MD/TVD:	21,211' / 10,926'
COUNTY/STATE:	Lea County, New Mexi			LATERAL LENGTH:	10,000'
Permian WI;				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	WCXY			COMPLETION DAYS:	19
GEOLOGIC TANGET:			MALL AFFILIE	_	
n=1.4.nvc		Y well and complete w	ith 44 stages. AFE include	s arming, completions, r	IOMPACK SHITI HITIGH
REMARKS:	AL install cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE C	OSTS	COSTS	COSTS	COSTS	COSTS
Land/Legal/Regulatory		\$ 59,066		37,500	\$ 96,566
Location, Surveys & Damag	-	288,079	18,067	2,500	308,647
Freight/Transportation		47,528	43,778	25,000	116,406
Kental - Surtace Equipment		124,32/	215,417	105,000	444,744
Kental - Downhole Equipme	ent	205,424	59,805		265,229
Kental - Living Quarters		48,083	54,480		102,562
III Directional Drilling, Surve	ys .	429,543	-		429,543
11 Orilling		753,820			753,820
12 Orul Bits		100,176			100,176
13 Fuel & Power		188,935	725,061		913,996 243,296
4 Cementing & Float Equip	71.1	243,296		15,000	15,000
15 Completion Unit, Swab, C. 16 Pertorating, Wireline, Silch			393,136	13,000	393,136
7 High Pressure Pump Truck			123,274		123,274
8 Completion Unit, Swab, C			146,484		146,484
Mud Circulation System	•	105,209			105,209
21 Mud Logging		17,529			17,529
22 Logging / Formation Evalu	ition	7,270	8,339		15,609
23 Mud & Chemicals		361,835	438,185	10,000	810,020
4 Water		43,459	661,625	300,000	1,005,083
25 Stimulation			814,033		814,033
26 Stimulation Flowback & D			121,606	150,000	271,606
28 Mud/Wastewater Disposa		193,104	61,151		254,254
30 Kig Supervision / Engineer	ing	121,196	133,420	21,667	276,283
32 Drig & Completion Overho	20	10,423			10,423
35 Labor		153,358	69,489	101,667	324,514 1,255,227
54 Proppant		14,660	1,233,227		14,660
95 Insurance 97 Contingency		14,000	24,421	3,833	28,254
99 Plugging & Abandonment					
>> 1 magang as repaired market	TOTAL INTANCIBLE	> 3,516,419	5,367,000	772,167	9,655,585
	TOTAL INTANGIBLES				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE CO	STS	COSTS	COSTS	COSTS	COSTS
50 Surface Casing		5 122,234			5 122,234
61 Intermediate Casing		344,284	-		344,284
62 Drilling Liner					
63 Production Casing		687,039			687,039
64 Production Liner					
65 Tubing			<u>-</u>	140,000	140,000
66 Wellhead 67 Packers, Liner Hangers		64,820	<u>_</u>	40,000	104,820
68 Tanks		14,732		45,833	45,833
69 Production Vessels				126,667	126,667
70 Flow Lines				66,667	65,667
71 Rod string				-	
72 Artificial Lift Equipment				90,000	90,000
73 Compressor			-	5,833	5,833
74 Installation Costs		-		•	
75 Surtace Pumps			-	61,667	61,667
76 Downhole Pamps			-		
77 Measurement & Meter Inst				116,667	116,667
78 Gas Conditioning / Dehyd	ation				
79 Interconnecting Facility Pi	ing			20,000	20,000
50 Gathering / Bulk Lines			<u> </u>	108.333	108,333
81 Valves, Dumps, Controller 82 Tank / Facility Containmer				43,333	43,333
83 Flare Stack	•			16,667	15,657
84 Electrical / Grounding				50,000	50,000
85 Communications / SCADA				36,667	36,667
86 Instrumentation / Safety				833	833
	TOTAL TANGIBLES	> 1,233,109		989,167	2,222,270
	TOTAL COSTS		5,367,000	1,761,334	11,877,862
	TOTALCOSTS	- 4,747,346	3,307,000	1/61/11	11,877,802
PARED BY Permian Reso	rces Operating, LLC:				
Drilling Engineer:	PS				
Completions Engineer:	ML				
Completions Engineer: Production Engineer:	ML DC				
Production Engineer:	DC .				
Production Engineer:	DC .				
Production Engineer:	DC .	Ca-l	CEO	VP - Opera	tions
Production Engineer:	DC .	Co-	CEO	VP - Opera	tions
Production Engineer: nian Resources Operating, Co-CEO	LLC APPROVAL:		JW -	VP - Opera	
Production Engineer:	LLC APPROVAL:	Co-l VP - Geoscie	JW -	VP • Opera	
Production Engineer: nian Resources Operating, Co-CEO	LLC APPROVAL:		jw nces	VP - Opera	
Production Engineer: nian Resources Operating, Co-CEO	LLC APPROVAL:		jw nces	VP • Opera	
Production Engineer: nian Resources Operating, Co-CEO	LLC APPROVAL:		jw nces	VP - Opera	
Production Engineer: nian Resources Operating, Co-CEO VP - Land & Legal	LLC APPROVAL: WH BG		jw nces	VP - Opera	
Production Engineer: nian Resources Operating, Co-CEO VP - Land & Legal	LLC APPROVAL: WH BG		jw nces	VP - Opera	
Production Engineer: nian Resources Operating, Co-CEO VP - Land & Legal	LLC APPROVAL: WH BG		jw nces		
Production Engineer: alan Resources Operating, Co-CEO VP-Land & Legal N OPERATING PARTNEI Company Name:	DC LLC APPROVAL: WH BC APPROVAL:		yw SO Working Interest (%):		CRM
Production Engineer: nian Resources Operating, Co-CEO VP-Land & Legal	DC LLC APPROVAL: WH BC APPROVAL:		nces SO		CRM
Production Engineer. nian Resources Operating. Co-CEO VP-Land & Legal N OPERATING PARTNEI Company Name:	DC LLC APPROVAL: WH BC APPROVAL:		yw SO Working Interest (%):	Та	CRM

Permian Resources Operating, LLC
300 N. Marienfeld St., Sie. 1000 Midland, TX 79701
Phone (432) 695-4222 • Fax (432) 695-4063
ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE	WELL NAME: Job LOCATION: Sec COUNTY/STATE: Permian WE GEOLOGIC TARGET: W TANGIBLE COST Land/ Legal/ Regulatory Location, Surveys & Damages 4 Preight/ Transportation S Rental - Surveys & Damages 4 Preight/ Transportation S Rental - Surveys & Damages 4 Preight/ Transportation S Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling Sirveys 12 Drilling Sirveys 12 Drilling Sirveys 12 Drilling Fromation Evaluation 57 High Pressure Fump Track 18 Completion Unit, Swab, CTU 20 Mud Circulation System 21 Mud & Chemicals 24 Water 25 Stimulation Flow back & Disp 32 Mud & Chemicals 24 Water 25 Stimulation Flow back & Disp 38 Mud / Water Well Promation Flow back & Disp 38 Mud / Water Stimulation Flow back & Disp 39 Mud / Water Stimulation Flow back & Disp 31 Drig & Completion Overhead 35 Labor 97 Completion Casting 61 Intermediate Casting 61 Intermediate Casting 62 Drilling Liner 63 Production Liner 65 Tubling 66 Wellhead 67 Prackes, Liner Hangers 68 Tanks 69 Production Vessels 71 Rod string 72 Artificial Lit Equipment 73 Compressor 11 Rod string 74 Lorentee Pump 75 bowshole Pumps 75 Downhole Pumps	xer 5-8 Federal Com 2 ction 5, T205-R34E a County, New Mexic CY ill a horizontal WCO install cost TS	ORILLING COSTS \$ 39,965 289,079 47,528 124,327 48,083 427,53,821 100,175 188,935 243,786 105,289 17,729 361,283 43,489 17,720 361,283 43,489 17,720 361,283 43,489 17,720 361,283 43,489 17,720 361,283	COMPLETION COSTS 18,067 43,78 215,417 59,805 54,480	FIELD: MD/TVD: LATERAL LENGTH: DRILLING DAYS: es drilling, completions, PRODUCTION COSTS 3/500 25,000 105,000 105,000 115,000	Tonto; Wolfcamp 21,211' / 10,926' 10,000' 19.6 19 flowback and Initial TOTAL COSTS \$ 95,566 308,647' 116,406 444,744 265,229' 10,2562 449,943' 75,8820 100,176 91,3996 243,294 15,000 395,136 125,274 146,484 105,209 1,005,085 810,023 27,606 284,254 276,283 10,421 1,4543 10,421 1,4543 11,4543 11,4543 11,4543 11,4543 11,4543 11,4543 11,4543 11,4543 11,4543 11,455,227 13,606
IDCATIONS Section PROPERTY IDCATIONS IDCATI	LOCATION: Se COUNTY/STATE: Le Permian WE GEOLOGIC TARGET: W GEOLOGIC TARGET: W INTANGIBLE COS TEARD/ Legal/ Regulatory 2 Location, Surveys & Damages 4 Preight/ Transportation 5 Rental - Surface Equipment 6 Rental - Downhole Equipment 7 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 13 Fuel & Flower 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Periorating, Wireline, Silckin 17 High Pressure Pump Trickin 18 Completion Unit, Swab, CTU 10 Periorating, Wireline, Silckin 18 Completion Unit, Swab, CTU 19 Must Circulation System 21 Must Logging 22 Logging/ Formation Evaluation 25 Stimulation Evaluation 25 Stimulation Flowback & Disp 28 Must/ Wastewater Disposal 30 Rig Supervision / Engineering 31 Drig & Completion Overhead 31 Labor 32 Pring & Completion Cverhead 31 Labor 34 Production Flowback & Disposal 35 Labor 36 Trackes 37 Contingency 39 Plugging & Abandonment TANGIBLE COST 60 Surface Casting 61 Intermediate Casting 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 71 Rod string 72 Artiticial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps	ction 5, T20S-R34E a County, New Mexic CXY ill a horizontal WCXY . install cost TS	ORILLING COSTS \$ 39,965 289,079 47,528 124,327 48,083 427,53,821 100,175 188,935 243,786 105,289 17,729 361,283 43,489 17,720 361,283 43,489 17,720 361,283 43,489 17,720 361,283 43,489 17,720 361,283	COMPLETION COSTS 18,067 43,78 215,417 59,805 54,480	MD/TVD: LATERAL LENGTH: DRILLING DAYS: es drilling, completions, PRODUCTION COSTS 37,500 2,5000 105,000 105,000 115,000	21,211' / 10,926' 10,000' 19,6 19 flowback and Initial TOTAL COSTS \$ 95,366 305,447 116,406 4447,744 265,229' 102,2562 475,943 75,8,820 100,176 91,5,996 243,296 15,000 393,136 123,274 145,484 105,289 11,005,083 810,033 271,605 284,254 226,283 104,253 10
COUNTY C	COUNTY/STATE: Lee	a County, New Mexic CY ill a horizontal WCO install cost TS C	DRILLING COSTS 5 39,066 288,079 47,628 124,327 205,424 48,183 429,543 75,18,20 100,176 1189,735 243,296 119,209 117,529 117,5	COMPLETION COSTS 18,067 43,78 215,417 59,805 54,480	PRODUCTION COSTS 37,500 2,500 105,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000	10,000' 19.6 19 flowback and Initial TOTAL COSTS \$ 96,366 305,647 116,406 444,744 265,229 10,2562 429,343 75,3420 100,176 913,396 13,500 395,136 125,274 146,484 105,209 17,529 18,000 19,100,188 1810,133 271,606 254,254 276,283 10,282 11,25
Pennin N	Permian WE GEOLOGIC TARGET: W GEOLOGIC TARGET: W REMARKS: Al INTANGIBLE COS TLAND/ Legal/ Regulatory 2 Location, Surveys & Damages 4 Preight/ Transportation 5 Rental - Surveys & Damages 4 Preight/ Transportation 5 Rental - Juvariace Equipment 6 Rental - Living Quarters 10 Directional Dritting, Surveys 11 Dritting 12 Dritt Bits 13 Fuel & Fower 11 Dritting 13 Fuel & Fower 11 Dritting 13 Fuel & Fower 14 Cementing & Floot Equip 15 Completion Unit, Swab, CTU 16 Pertorating, Wireline, Sikcklin 17 High Pressure Fump Truck 18 Completion Unit, Swab, CTU 20 Mud Circulation System 21 Mud Logging 22 Logging/ Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation Flow back & Disp 25 Mud/ Wastewater Disposal 30 Rig Supervision / Engineering 32 Drig & Completion Overhead 35 Labor 34 Propant 35 Insurance 97 Contingency 99 Plugging & Abandonment TANGIBLE COST 80 Surface Casing 61 Intermediate Casing 62 Dritting, Uner 63 Production Libre 65 Tubing 66 Weithead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 How Lines 71 Rod string 72 Artificial Lit Equipment 73 Compressor 74 Installation Costs 75 Downhole Fumps 75 Downhole Fumps	CXY ill a horizontal WCXY install cost TS	DRILLING COSTS 5 39,066 288,079 47,628 124,327 205,424 48,183 429,543 75,18,20 100,176 1189,735 243,296 119,209 117,529 117,5	COMPLETION COSTS 18,067 43,78 215,417 59,805 54,480	DRILLING DAYS: COMPLETION DAYS: es drilling, completions, PRODUCTION COSTS 37,500 25,900 105,000 105,	19.6 19 flowback and Initial TOTAL COSTS 96:566 308:647 116:406 444,744 265:229 102:562 102:562 102:562 103:5
CECOLOGIC TARCET CONTESTION DATE TOTAL STATES TOTAL STATE	GEOLOGIC TARGET: W REMARKS: Al INTANGIBLE COS TLANG/LEGAI/ Regulatory 2 Location, Surveys & Damages 1 reight/ Transportation 5 Rental - Durabor Burneys 6 Rental - Durabor Burneys 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bib 13 Fuel & Power 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Periorating, Wireline, Slicklin 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 10 Periorating, Wireline, Slicklin 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 10 Periorating, Wireline, Slicklin 12 Omda Circolation System 21 Mud Logging 22 Logging/ Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation Flowback & Disp 26 Mud/ Wastewater Disposal 30 Rig Supervision / Engineering 31 Drig & Completion Overhead 31 Labor 32 Pring & Completion Overhead 35 Labor 37 Production Flowback 40 Production Casting 41 Production Casting 41 Production Casting 42 Prilling 43 Production Casting 44 Production Vessels 71 Hood string 72 Artificial Lit Equipment 73 Compressor 74 Installation Costs 75 Dornatoe Fumps 75 Downhole Fumps	ill a horizontal WCCO install cost TS C C TO TO TO TO TO TO TO TO	DRILLING COSTS 39,965 288,079 47,528 124,327 20,3424 48,083 425,943 100,175 188,955 241,296 105,209 17,529 17,529 17,529 19,5104 121,196 104,25 105,338 115,560 13,516,419	COMPLETION COSTS 18,067 43,78 215,417 59,805 54,480	COMPLETION DAYS: es drilling, completions, PRODUCTION COSTS 37,500 2,5000 105,	19 flowback and Initial TOTAL CO5TS \$ 95,566 308,547 116,406 444,744 265,229 102,562 429,343 75,38,20 100,176 913,996 243,296 13,906 393,136 125,274 146,484 105,209 15,009 810,020 1,005,083 810,033 27,606 284,254 276,283 104,213 1,255,227 13,606
Delia prizocal WCMY well and complete with 44 slages. AFE includes defilling, completions, Rowback and Installar Research COSTS	INTANGIBLE COS TLand/ Legal/ Regulatory 2 Location, Surveys & Damages 4 Preight/ Transportation 5 Rental - Surface Equipment 6 Rental - Downhole Equipment 7 Rental - Surface Equipment 7 Rental - Surface Equipment 8 Rental - Downhole Equipment 10 Directional Dritting, Surveys 11 Dritting 12 Dritting 13 Paril & Fower 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Sikcklin 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 10 Mud Circulation System 12 Mud Logging 12 Logging / Formation Evaluation 12 Stimulation 12 Stimulation 13 Mud & Chemicals 14 Water 15 Stimulation 16 Stimulation Flowback & Disp 18 Mud (Wastewater Disposal 19 Mid & Chemicals 19 Mid & Chemicals 19 Stimulation 15 Stimulation 16 Stimulation Flowback & Disp 18 Stimulation 17 Tanging & Completion Overhead 18 Labor 19 Flugging & Abandonment 10 Tanging 10 Intermediate Casing 10 Transport 10 Torduction Casing 10 Production Liner 18 Torduction Liner 18 Torduction Casing 10 Production Units 18 Transport 18 Stimulation 19 Production Vessels 10 How Lines 19 Rod string 12 Artificial Liti Equipment 10 Compressor 11 Installation Costs 15 Surface Pumps 15 Downhole Pumps	ill a horizontal WCCO install cost TS C C TO TO TO TO TO TO TO TO	DRILLING COSTS 39,965 288,079 47,528 124,327 20,3424 48,083 425,943 100,175 188,955 241,296 105,209 17,529 17,529 17,529 19,5104 121,196 104,25 105,338 115,560 13,516,419	COMPLETION COSTS 18,067 43,78 215,417 59,805 54,480	PRODUCTION COSTS 37,500 2,500 2,500 105,000 105,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000	Rowback and Initial TOTAL COSTS \$ 96,566 300,5647 116,406 444,744 265,229 102,756 479,543 755,220 100,176 913,396 243,296 13,000 393,136 125,274 145,884 105,209 1,100,183 810,020 1,100,183 810,023 271,606 224,254 226,283 104,223 324,314 1,255,227
Dilla broiseals MCNT well and complete with 44 sugges. AFE includes willlang completions, Rowback and Insidal Cest	INTANGIBLE COS TEARD/ Legal/ Regulatory 2 Location, Surveys & Damages 4 Preight/ Transportation 5 Rental - Surface Equipment 6 Rental - Downhole Equipment 7 Rental - Living Quarters 10 Directional Dritting, Surveys 11 Drilling 12 Drill Bits 13 Fuel & Fower 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Sikklin 17 High Pressure Fump Truck 18 Completion Unit, Swab, CTU 20 Mud Circulation System 21 Loughing 22 Logging / Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation 25 Stimulation Elowback & Disp 28 Mud / Wastewater Disposal 29 Mud & Chemicals 20 Mud & Chemicals 20 Mud & Chemicals 21 Witg Supervision / Engineering 31 Drig & Completion Overhead 32 Lober 97 Contingency 99 Plugging & Abandonment TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 64 Production Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 71 Rod string 72 Artificial Liti Equipment 73 Compressor 74 Installation Costs 75 Downhole Fumps 75 Downhole Fumps 76 Downhole Fumps 76 Downhole Fumps	TS TS TO THE TENT OF THE TEN	DRILLING COSTS 39,965 288,079 47,528 124,327 20,3424 48,083 425,943 100,175 188,955 241,296 105,209 17,529 17,529 17,529 19,5104 121,196 104,25 105,338 115,560 13,516,419	COMPLETION COSTS 18,067 43,78 215,417 59,805 54,480	PRODUCTION COSTS 37,500 2,500 25,000 105,000	TOTAL COSTS \$ 95,566 308,647 110,406 448,744 265,229 102,562 475,943 755,820 100,175 913,396 13,000 395,136 125,274 146,484 105,2099 17,529 18,000 810,020 1,005,083 811,033 271,606 254,254 276,283 10,423 10,5227 11,456
REMANES: Alt basile Alt b	REMARKS: Al INTANGIBLE COS T Land/ Legal/ Regulatory 2 Location, Surveys & Damages 4 reight/ Transportation 5 Rental - Surface Equipment 6 Rental - Surface Equipment 7 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bils 13 Fuel & Fower 14 Cementing & Floet Equip 15 Completion Unit, Swab, CTU 16 Periorating, Vineline, Sickidin 17 High Pressure Fump Truck 18 Completion Unit, Swab, CTU 10 Mud Circulation System 12 Loggling / Formation Evaluation 22 Loggling / Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation 26 Stimulation Flowback & Disp 28 Mud / Wastewater Disposal 29 Mid & Chemicals 24 Water 25 Stimulation Flowback & Disp 28 Mud / Wastewater Disposal 30 Rig Supervision / Engineering 31 Drig & Completion Overhead 31 Labor 47 Proppant 59 Insurance 97 Contingency 99 Pinggling & Abandonment T TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 64 Production Line 63 Production Casing 64 Production Line 65 Tubling 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 71 How Lines 71 Rod string 72 Artificial Liti Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps	TS TS TO THE TENT OF THE TEN	DRILLING COSTS 39,965 288,079 47,528 124,327 20,3424 48,083 425,943 100,175 188,955 241,296 105,209 17,529 17,529 17,529 19,5104 121,196 104,25 105,338 115,560 13,516,419	COMPLETION COSTS 18,067 43,78 215,417 59,805 54,480	PRODUCTION COSTS 37,500 2,500 25,000 105,000	TOTAL COSTS \$ 95,566 308,647 110,406 448,744 265,229 102,562 475,943 755,820 100,175 913,396 13,000 395,136 125,274 146,484 105,2099 17,529 18,000 810,020 1,005,083 811,033 271,606 254,254 276,283 10,423 10,5227 11,456
DELLING DELLING DELLING CORPS	INTANGIBLE COS T Land/ Legal/ Regulatory 2 Location, Surveya & Damages 4 Preight/ Transportation 5 Rental - Surface Equipment 6 Rental - Downhole Equipment 7 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 13 Fuel & Fower 14 Cementing & Flost Equip 15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Silcklin 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 10 Perforating, Wireline, Silcklin 21 Mud Logging 22 Logging/ Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation Flow back & Disp 25 Stimulation Flow back & Disp 26 Mud/ Wastewater Disposal 30 Rig Supervision / Engineering 31 Drig & Completion Overhead 35 Labor 97 Contingency 99 Flugging & Abandonment TO TANGIBLE COST 60 Surface Casting 61 Intermediate Casting 62 Drilling 63 Production Liber 63 Production Liber 64 Production Liber 65 Tubing 66 Weithead 66 Prackes, Liner Hangers 66 Tanks 69 Production Vessels 71 Rod string 72 Artitical Lit Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps 75 Downhole Pumps	TS TO THE TOTAL INTENGIBLES	COSTS	COSTS 18,087 43,778 215,417 59,805 54,480	COSTS 37,500 2,500 25,000 105,000 105,000	COSTS 96,566 308,647 116,406 444,744 265,229 102,552 425,343 75,820 100,176 913,996 243,596 15,800 393,136 125,274 146,484 105,209 17,529 1,5609 810,020 1,005,183 8110,020 224,224 276,283 104,233 124,1506
INTANCRILE COSTS	Tand/Legal/Regulatory Location, Surveys & Damages 4 Preight/ Transportation 5 Rental - Surveys & Damages 4 Preight/ Transportation 5 Rental - Downhole Equipment 7 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bils 13 Fuel & Power 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Pertorating, Wireline, Slicklin 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 10 Fertorating, Wireline, Slicklin 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 20 Mud Circulation System 21 Mud Logging 22 Logging/ Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation Flowback & Disp 25 Stimulation 26 Sitmulation Flowback & Disp 26 Mud/ Waterwater Disposal 30 Rig Supervision / Engineering 30 Rig Supervision / Engineering 31 Labor 97 Contingency 99 Plugging & Abandonment Tanciller 63 Production Liner 63 Production Casing 64 Production Liner 65 Tubling 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 71 Rod string 72 Artiticial Lit Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps 76 Downhole Pumps	TO TAL INTANGIBLES	COSTS	COSTS 18,087 43,778 215,417 59,805 54,480	COSTS 37,500 2,500 25,000 105,000 105,000	COSTS 96,566 308,647 116,406 444,744 265,229 102,552 425,343 75,820 100,176 913,996 243,596 15,800 393,136 125,274 146,484 105,209 17,529 1,5609 810,020 1,005,183 8110,020 224,224 276,283 104,233 124,1506
INTANCRILE COSTS	Tand/Legal/Regulatory Location, Surveys & Damages 4 Preight/ Transportation 5 Rental - Surveys & Damages 4 Preight/ Transportation 5 Rental - Downhole Equipment 6 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 13 Fuel & Power 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Periorating, Wireline, Slicklin 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 19 Med Circulation System 21 Med Logging 22 Logging/Formation Evaluation 23 Med & Chemicals 24 Water 25 Stimulation Flowback & Disp 25 Stimulation Flowback & Disp 26 Med / Wastewater Disposal 30 Rig Supervision / Engineering 31 Drill & Completion Coverhead 31 Labor 54 Proppant 54 Insurance 97 Contingency 99 Plugging & Abandonment TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Liner 63 Production Liner 65 Tubing 66 Weithead 67 Prackers, Liner Hangers 68 Tanks 69 Production Vessels 71 Rod string 72 Artiticial Lit Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Lowenhole Pumps 76 Lowenhole Pumps	TO TAL INTANGIBLES	COSTS	COSTS 18,087 43,778 215,417 59,805 54,480	COSTS 37,500 2,500 25,000 105,000 105,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000 115,000	COSTS 96,566 308,647 116,406 444,744 265,229 102,552 425,343 75,820 100,176 913,996 243,596 15,800 393,136 125,274 146,484 105,209 17,529 1,5609 810,020 1,005,183 8110,020 224,224 276,283 104,233 124,1506
TLABIF (LEAP) Regulatory	Tand/Legal/Regulatory Location, Surveys & Damages 4 Preight/ Transportation 5 Rental - Surveys & Damages 4 Preight/ Transportation 5 Rental - Downhole Equipment 6 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 13 Fuel & Power 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Periorating, Wireline, Slicklin 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 19 Med Circulation System 21 Med Logging 22 Logging/Formation Evaluation 23 Med & Chemicals 24 Water 25 Stimulation Flowback & Disp 25 Stimulation Flowback & Disp 26 Med / Wastewater Disposal 30 Rig Supervision / Engineering 31 Drill & Completion Coverhead 31 Labor 54 Proppant 54 Insurance 97 Contingency 99 Plugging & Abandonment TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Liner 63 Production Liner 65 Tubing 66 Weithead 67 Prackers, Liner Hangers 68 Tanks 69 Production Vessels 71 Rod string 72 Artiticial Lit Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Lowenhole Pumps 76 Lowenhole Pumps	TO TAL INTANGIBLES	\$ 59,066 286,079 47,628 124,327 20,342 48,083 427,943 753,829 100,175 186,935 243,296 17,529 7,270 105,835 43,459 193,104 121,196 104,23 153,536 145,660	18,067 43,778 215,417 59,805 54,480 725,061 393,136 123,274 146,484	37,500 2,5000 25,000 105,000 15,000 15,000 100,000 100,000 100,000 101,667	308,647 116,406 444,744 265,229 102,562 4479,343 755,820 100,176 913,996 243,2796 15,000 395,156 125,274 146,484 105,2099 17,529 18,000 8810,020 1,005,083 811,033 271,606 253,254 276,283 104,23 114,25 114,
1	2 Location, Surveys & Damages 4 Preight, Transportation 5 Rental - Surface Equipment 6 Rental - Journaportation 7 Rental - Living Quarters 10 Directional Drilling, Surveys 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 13 Fuel & Fower 14 Cementing & Float Equip 15 Completion Until, Swab, CTU 16 Pertorating, Wireline, Slicklin 17 High Pressure Pump Truck 18 Completion Until, Swab, CTU 20 Mud Circulation System 21 Logging 22 Logging / Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation 25 Stimulation 26 Stimulation Flow back & Disp 28 Mud / Wastewater Disposal 30 Mtg Supervision / Engineering 31 Drig & Completion Overhead 35 Labor 54 Proppant 95 Insurance 97 Contingency 99 Plugging & Abandonment To TANGIBLE COST 60 Traks 63 Production Line 64 Production Line 65 Tubling 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 71 Ikod string 72 Artificial Lili Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Lowenhole Pumps 76 Lowenhole Pumps 76 Lowenhole Pumps	n Otal intangibles 2	288,079 47,829 124,327 205,242 48,083 427,543 100,175 186,575 243,296 105,207 105,209 17,529 7,270 551,833 43,459 195,104 121,196 104,225 13,358	43,78 215,417 59,805 54,480	15,000 105,000 105,000 15,000 15,000 100,000 21,667	308,647 116,406 444,744 265,229 102,562 4479,343 755,820 100,176 913,996 243,2796 15,000 395,156 125,274 146,484 105,2099 17,529 18,000 8810,020 1,005,083 811,033 271,606 253,254 276,283 104,23 114,25 114,
# Integral Transportation	4 Preight, Transportation 5 Rental - Surface Equipment 6 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 13 Fuel & Fower 13 Drilling 13 Preid & Fower 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Periorating, Wireline, Slicklin 17 High Pressure Fump Track 18 Completion Unit, Swab, CTU 10 Feriorating, Wireline, Slicklin 18 Completion Unit, Swab, CTU 10 Mud Circulation System 21 Mud Logging 22 Mud Logging 23 Mud & Chemicals 23 Mud & Chemicals 23 Water 25 Stimulation Flowback & Disp 26 Stimulation Flowback & Disp 26 Mud / Wastewater Disposal 30 Rig Supervision / Engineering 31 Drig & Completion Overhead 35 Labor 97 Contingency 99 Plugging & Abandonment TO TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Liner 65 Tubing 66 Weithead 67 Prackers, Liner Hangers 68 Tanks 69 Production Casing 72 Artificial Liti Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps	n Otal intangibles 2	47,625 174,327 205,424 48,083 425,943 753,824 100,175 188,935 243,296 110,209 117,529 117,529 72,727 361,833 43,439 1121,196 114,560 115,5388	43,78 215,417 59,805 54,480	25,000 105,000 	116,406 444,744 265,229 102,562 429,543 75,8420 100,176 913,996 243,296 15,000 395,136 125,274 146,484 105,209 17,929 15,609 810,020 1,005,085 810,023 27,1606 254,254 276,283 10,4243 1,255,227
\$	5 Rental - Surface Equipment 6 Rental - Lowmbote Equipment 7 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 13 Firel & Fower 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Pertorating, Wireline, Slickle 16 Completion Unit, Swab, CTU 16 Pertorating, Wireline, Slickle 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 20 Mud Circulation System 21 Logging 22 Logging / Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation Flowback & Disp 25 Stimulation Flowback & Disp 26 Mud / Wastewater Disposal 30 Mtg Supervision / Engineering 31 Drig & Completion Overhead 35 Labor 54 Proppant 54 Proppant 59 Plugging & Abandonment TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 64 Production Casing 64 Production Casing 64 Production Casing 65 Vackers, Liner Hangers 65 Tanks 69 Production Vessels 71 Rod string 72 Artificial Lit Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Lowenton Pumps 76 Lowenton Pumps	n Otal intangibles 2	123,327 205,427 48,083 4275,437 100,176 188,935 243,296	215,417 59,805 54,480	105,000	444,744 265,229 10,2552 429,343 758,822 100,176 913,996 243,276 15,000 393,136 125,274 146,484 10,52,09 17,529 18,002,09 81,002,09 81,005,083 814,033 271,606 253,254 276,283 10,422 324,514 1,255,227
	6 Kental - Downhote Equipment 7 Kental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill His 13 Fuel & Fower 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Pertorating, Wireline, Sikcklin 17 High Pressure Fump Truck 18 Completion Unit, Swab, CTU 20 Mud Circulation System 21 Mud Logging 22 Mud Water Growth Completion 23 Mud Containton System 23 Mud Water Growth Completion 24 Water 25 Stimulation 28 Stimulation 28 Simulation 28 Simulation 39 High Supervision / Engineering 31 Living & Completion Overhead 31 Labor 34 Water 35 Lobr 36 Frophant 37 Living & Completion Overhead 36 Labor 39 Piugging & Abandonment TO TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Prilling Liner 63 Production Casing 64 Production Liner 65 Tubling 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 71 Rod string 72 Artiticial Liti Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Lownhole Pumps 76 Lownhole Pumps	n Otal intangibles 2	205.424 48.83 429.543 753.820 100,176 188,935 243,296 110,209 17,529 7,270 350.835 43,459 195,104 121,196 104,25 153,538	59,805 54,807	15,000 10,000 300,000 150,000 21,667	10/2562 42/5943 753.820 100,176 915.3996 243,296 15,000 393,136 125,274 146,824 105,249 17,229 15,600 810,020 1,005,083 810,020 1,005,083 104,23 27,646 224,254 226,283 104,23 14,255,227
	7 Rental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bils 12 Drill Bils 13 Field & Flower 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Pertorating, Wireline, Silcktin 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 20 Mud Circulation System 21 Mud Logging 22 Logging / Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation Flowback & Disp 25 Stimulation 25 Stimulation Flowback & Disp 26 Mud / Wastewater Dispan 30 Rig Supervision / Engineering 31 Drig & Completion Overhead 31 Labor 54 Proppant 54 Proppant 59 Production Casting 61 Intermediate Casting 61 Intermediate Casting 63 Production Casting 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 71 Rod string 72 Artiticial Lit Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Lowratee Pumps 76 Lowentoe Pumps	n Otal intangibles 2	425,543 753,820 100,176 186,5755 243,596	7/25,0611 393,136 123,274 146,484 8,339 4.38,185 661,625 81,103 121,006 61,151 133,42U 69,489 1,255,227	15,000 10,000 300,000 150,000 21,667	425,943 755,820 100,176 913,996 243,296 15,000 395,150 125,274 146,484 105,2099 17,529 15,009 810,020 1,005,083 811,033 271,606 253,254 276,283 104,23 11,255,227
10 Discriptional Diffuling, Surveys	10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 13 Fuel & Fower 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Fertorating, Wireline, Silcklin 17 High Pressure Fump Truck 18 Completion Unit, Swab, CTU 20 Mud Circulation System 21 Mud Logging 22 Logging / Formation Evaluation 23 Mud Logging 24 Water 25 Stimulation Flowback & Disp 28 Mud / Wastewater Disposal 30 High Supervision / Engineering 30 High Supervision / Engineering 31 Drig & Completion Overhead 31 Labor 45 Proppanl 95 Insurance 97 Contingency 99 Plugging & Abandonment TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 61 Intermediate Casing 63 Production Liner 65 Tubling 64 Production Liner 65 Tubling 65 Production Vessels 70 How Lines 71 Rod String 72 Artiticial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Lowenbeel Pumps 76 Lowenbeel Pumps 76 Lowenbeel Pumps	n Otal intangibles 2	753,821 109,175 188,935 243,296 	725,061 393,136 1723,274 146,484 8,339 438,185 661,625 814,033 121,095 61,151 135,420 654,889 1,255,227	15,000 10,000 300,000 150,000 21,667	7/53,820 100,17/6 913,996 243,296 15,000 393,136 125,274 146,884 105,209 17,529 15,609 810,020 1,005,083 810,023 271,605 224,254 226,283 10,423 1,255,227
12 July 18 us	12 Lyril Bits 13 Fuel & Fower 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 15 Periorating, Wireline, Sticklin 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 20 Mud Circulation System 21 Mud Logging 21 Mud Logging 22 Logging / Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation 25 Stimulation Flowback & Disp 26 Mud / Wastewater Disposal 30 Rig Supervision / Engineering 30 Rig Supervision / Engineering 32 Lyrig & Completion Overhead 31 Libor 45 Froughtion 57 Londingency 59 Plugging & Abandonment Tu TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Liner 65 Tubing 64 Production Liner 65 Tubing 65 Verlines 67 Prackers, Liner Hangers 68 Tanks 69 Production Vessels 71 Rod string 72 Artificial Litt Equipment 73 Compressor 74 Instalation Costs 75 Surface Pumps 75 Lowenbed Pumps 76 Lowenbed Pumps	n Otal intangibles 2	100,175 188,935 243,296	725,061 393,136 123,274 146,484 438,185 661,625 813,035 121,606 61,151 133,420 69,489	15,000 10,000 300,000 150,000 21,667	100,176 913,996 243,276 15,000 393,136 125,274 146,484 105,209 17,529 18,002,083 810,033 271,606 253,254 276,283 10,422 324,514 1,255,227
13 12 12 12 12 12 12 12	13 Fuel & Fower 14 Cementing & Float Equip 15 Completion Unit, Swab, CTU 16 Periorating, Wireline, Slicklin 17 High Pressure Fump Truck 18 Completion Unit, Swab, CTU 19 Fuel Market Pump Truck 18 Completion Unit, Swab, CTU 20 Mud Circulation System 21 Mud Logging 22 Logging / Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation Flow back & Disp 25 Stimulation Flow back & Disp 26 Mud / Wastewater Disposal 30 Rig Supervision / Engineering 31 Lrig & Completion Overhead 35 Labor 97 Comtingency 99 Plugging & Abandonment TO TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Liner 65 Tubing 66 Weithead 67 Prackers, Liner Hangers 68 Tanks 69 Production Ler 65 Tubing 60 Weithead 67 Prackers, Liner Hangers 68 Tanks 69 Production Vessels 71 Rod string 72 Artiticial Liti Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Lowenbox Pumps	n Otal intangibles 2	188,935 243,296	393,136 122,274 146,484 439,185 661,625 814,033 121,056 61,151 133,420 69,489	10,000 300,000 150,000 21,667	913,996 243,296 15,000 395,136 125,274 146,484 105,209 17,529 15,609 810,020 1,005,085 810,020 27,606 254,254 276,283 10,423 11,455,227 13,5607
\$4.00 \$3.	14 Cementing & Float Equip 15 Completion Unit, Swah, CTU 16 Pertorating, Wireline, Slicklin 17 High Pressure Pump Truck 18 Completion Unit, Swah, CTU 20 Mud Circulation System 21 Logging / Formation Evaluation 22 Logging / Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation 25 Stimulation 26 Stimulation Flow back & Disp 28 Mud / Wastewater Disposal 30 Hig Supervision / Engineering 31 Drig & Completion Overhead 35 Labor 54 Proppanl 59 Insurance 97 Contingency 99 Plugging & Abandonment To TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 64 Production Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 71 Rod string 72 Artificial Liti Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Lownrace Pumps 76 Lownrace Pumps	n Otal intangibles 2	243,296	393,136 122,274 146,484 439,185 661,625 814,033 121,056 61,151 133,420 69,489	10,000 300,000 150,000 21,667	243,296 15,000 393,136 125,274 145,484 105,209 17,529 15,609 810,020 1,005,085 17,005,085 17,005,085 17,005,085 17,005,085 17,005,085 17,005,085 18,1033 271,005 275,235 103,235 103,235 103,235 103,235 11,255,227
15 Completion Unit, Sweb, CLU	18 Completion Unit, Swab, CTU 16 Pertorating, Wireline, Sikcklin 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 20 Mud Circulation System 21 Mud Logging 22 Logging/ Formation Evaluation 23 Mud & Chemicals 24 Water 25 Silmulation 26 Silmulation Flowback & Disp 28 Mud/ Wastewater Disposal 30 Rig Supervision / Engineering 31 Lift & Completion Overhead 35 Labor 54 Proppanl 95 Insurance 97 Contingency 99 Plugging & Abandonment TO TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Prilling Liner 63 Production Liner 65 Production Liner 65 Tubbig 66 Production Liner 67 Tubbig 68 Production Liner 67 Takes 68 Tanks 69 Production Vessels 71 Rod string 72 Artificial Litt Equipment 73 Compressor 74 Instalation Costs 75 Surface Pumps 75 Downhole Pumps 75 Downhole Pumps	n Otal intangibles 2	1U2,209 17,529 7,270 351,833 43,459 195,104 121,196 104,22 153,538 145,660	123,274 146,484 	10,000 300,000 150,000 21,667	15,000 395,136 125,274 146,484 105,209 17,529 18,002 1,005,083 810,020 27,1606 254,254 276,283 10,423 11,255,227
10 Perionality, Wietlers, Silocitine 13 Orapitation Unit, Paris Track 14 Comparison Unit, Paris Track 15 Comparison Unit, Paris 15 Comparison Unit,	16 Pertorating, Wireline, Silckill, 17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU 20 Mud Circulation System 21 Mud Logging 22 Logging / Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation Flowback & Disp 26 Mud / Wastewater Disposa 30 Hig Supervision / Engineering 31 Drig & Completion Overhead 33 Libber 54 Proppant 54 Proppant 59 Plugging & Abandonment TANGIBLE COST 60 Surface Lasing 61 Intermediate Casing 62 Drilling Liber 63 Production Liner 63 Production Liner 65 Tubing 69 Wellinead 79 Packers, Liner Hangers 80 Tanks 69 Production Vessels 71 Hod String 72 Artiticial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Lowrater Pumps	n Otal intangibles 2	17,529 7,270 361,833 43,459 193,184 121,196 104,23 153,588	123,274 146,484 	10,000 300,000 150,000 21,667	395,136 125,274 146,484 105,209 17,229 15,609 810,020 1,000,083 814,033 271,606 224,254 276,283 104,253 14,255,227 13,565,227
17.154g Pressure Pump Truck	17 High Pressure Pump Truck 18 Completion Until, Swab, CTU 20 Mud Circulation System 21 Mud Logging 22 Logging / Formation Evaluatio 23 Mud & Chemicals 24 Water 25 Stimulation 25 Stimulation Flowback & Disp 26 Mud / Wastewater Disposal 30 Rig Supervision / Engineering 32 Drig & Completion Overhead 35 Labor 54 Proppani 55 Insurance 97 Contingency 99 Plugging & Abandonment 57 TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubling 65 Vedithead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 How Lines 71 Rod string 72 Artiticial Litt Equipment 73 Compressor 74 Instalation Costs 75 Surface Pumps 75 Downhole Pumps 75 Downhole Pumps 75 Downhole Pumps	n Otal intangibles 2	17,529 7,270 361,833 43,459 193,184 121,196 104,23 153,588	123,274 146,484 	150,000 21,667	125,2/4 146,484 105,209 17,529 15,609 81,002,083 813,033 271,606 253,254 275,283 10,423 11,255,227 13,562
18. Completion total, Sweap, CTU	18 Completion Unit. Swab, CTU 20 Mud Circulation System 21 Mud Logging 22 Logging / Formation Evaluatio 23 Mud & Chemicals 24 Water 25 Stimulation Flowback & Disp 28 Mud / Wastewater Disposal 39 Rig Supervision / Engineering 32 Drig & Completion Overhead 35 Labor 54 Proppant 95 Insurance 97 Contingency 99 Plugging & Abandonment TO TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 64 Production Casing 65 Production Uner 65 Tubing 66 Weithead 67 Packers, Liner Hangers 88 Tanks 89 Production Vessels 71 Rod string 72 Artiticial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Loventice Pumps 75 Downhole Pumps 75 Downhole Pumps	OTAL INTANGIBLES >	17,529 7,270 361,833 43,459 193,184 121,196 10,425 103,588	8,339 438,185 681,625 8114,033 121,605 61,151 135,420 64,489 1,255,227	150,000 21,667	145,484 105,209 17,529 15,609 810,022 1,005,083 814,093 271,605 224,254 276,283 104,253 1,255,227
23 Mont Circulation System	20 Mud Circulation System 21 Mud Logging 22 Logging / Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation 25 Stimulation Flowback & Disp 28 Mud / Wastewater Disposal 30 Rig Supervision Engineering 32 Drig & Completion Overhead 35 Labor 48 Proppan 49 Flugging & Abandonment To TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weithead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 How Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps 75 Downhole Pumps 75 Downhole Pumps 76 Downhole Pumps	OTAL INTANGIBLES >	17,529 7,270 361,833 43,459 193,184 121,196 10,425 103,588	8,339 439,185 661,025 814,033 121,046 61,151 133,42U 69,489 1,255,227	150,000 21,667	105,269 17,529 15,609 810,020 1,005,085 814,033 271,606 254,254 276,283 10,425 324,514 1,255,227
21 Most Organics	21 Mud Logging 22 Logging / Formation Evaluatio 23 Mud & Chemicals 24 Water 25 Stimulation Flowback & Disp 25 Stimulation Flowback & Disp 28 Mud / Wastewater Disposal 30 Rig Supervision / Engineering 31 Drig & Completion Overhead 35 Labor 36 Propani 39 Plugging & Abandonment TO TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weithead 67 Packers, Liner Hangers 88 Tanks 69 Production Vessels 71 Rod string 72 Artiticial Liti Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Lowenton Fumps 75 Lowenton Fumps 75 Lowenton Fumps 75 Lowenton Fumps 75 Downhole Fumps 75 Downhole Fumps 75 Downhole Fumps 76 Downhole Fumps 77 Downhole Fumps 78 Downhole Fumps 77 Downhole Fumps 78 Downhole Fumps	OTAL INTANGIBLES >	17,529 7,270 361,833 43,459 193,184 121,196 10,425 103,588	438,185 681,625 814,033 121,506 61,151 133,420 69,489 1,255,227	150,000 21,667	17,529 15,609 810,020 1,005,085 814,033 27,1606 254,254 276,283 10,423 1,255,227 13,560
22 Logging Formation in Valuation 7,70" 83,97 13,84% 13,95% 1	22 Logging/ Formation Evaluation 23 Mud & Chemicals 24 Water 25 Stimulation 25 Stimulation Flowback & Disp 28 Mud / Wastewater Disposal 30 Mtg Supervision / Enginery 31 Living & Completion Overhead 31 Labor 54 Proppant 95 Insurance 97 Contingency 99 Plugging & Abandonment To TANGIBLE COST 60 Surface Casing 61 Infermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 68 Tanks 69 Production Vessels 71 How Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Lownord Pumps 76 Lownord Pumps 76 Lownord Pumps 77 Lownord Pumps 78 Lownord Pu	OTAL INTANGIBLES >	7,270 361,833 43,459 43,459 195,104 121,196 104,25 153,358 14,660	438,185 681,625 814,033 121,506 61,151 133,420 69,489 1,255,227	150,000 21,667	15,609 810,020 1,005,083 814,033 221,606 254,254 226,283 10,425 324,314 1,255,227 13,609
23 Moid & Chemicals	23 Mud & Chemicals 24 Water 25 Stimulation 26 Stimulation Flowback & Disp 28 Mud / Wastewater Disposal 30 Rig Supervision / Engineering 32 Drig & Completion Overhead 35 Labor 34 Proppant 35 Insurance 37 Contingency 39 Plugging & Abandonment 37 TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 61 Intermediate Casing 63 Production Liner 65 Tubling 65 Production Liner 65 Tubling 65 Production Liner 67 Tanks 69 Yanks 69 Tanks 69 Production Vessels 71 Rod string 72 Artiticial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps 75 Downhole Pumps 75 Downhole Pumps 75 Downhole Pumps 76 Downhole Pumps	OTAL INTANGIBLES >	35),R33 43,459 195,TU4 121,196 104,22 153,538 43,560	438,185 681,625 814,033 121,506 61,151 133,420 69,489 1,255,227	150,000 21,667	810,020 1,005,085 814,033 271,606 254,254 276,283 10,425 334,514 1,255,227
24 Water	24 Water 25 Stimulation 26 Stimulation Flowback & Disp 28 Mudy Wastewater Disposal 30 Ntg Supervision / Engineering 31 Drig & Completion Overhead 35 Labor 54 Proppani 59 Insurance 97 Contingency 99 Plugging & Abandonment TANCIBLE COST 80 Surface Casing 61 Intermediate Casing 64 Production Liner 63 Production Liner 63 Production Liner 63 Production Liner 63 Production Liner 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 71 How Lines 71 Rod string 72 Artificial Liti Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps 75 Downhole Pumps	OTAL INTANGIBLES >	193,104 121,196 10423 153,558 14,560	661,625 814,033 121,606 61,151 135,420 69,489 1,255,227	150,000 21,667	1,005,083 814,033 271,606 254,254 276,283 10,425 324,514 1,255,227
28 Stimulation \$14,035 \$11,035 \$17,035 \$17,035 \$17,035 \$20 Mad / Westwester Disposed \$15,515 \$15,007 \$25,225 \$15,007 \$25,225 \$15,007 \$25,225 \$15,007 \$25,225 \$25,007	25 Stimulation 26 Stimulation Flowback & Disp 28 Mud/ Wastewater Disposal 30 Rig Supervision / Engineering 32 Drig & Completion Overhead 35 Labor 58 Proppant 95 Insurance 97 Contingency 99 Plugging & Abandonment TI TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 68 Production Liner 65 Tubling 69 Veditead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 How Lines 71 Rod string 72 Artiticial Leit Equipment 73 Compressor 74 Instalation Costs 75 Surface Pumps 75 Downhole Pumps 75 Downhole Pumps 75 Downhole Pumps 76 Downhole Pumps	OTAL INTANGIBLES >	193,104 121,196 10,423 153,358 14,660	814,033 121,606 61,151 133,420 69,489 1,255,227	150,000 21,667 101,667	814,033 271,606 254,254 276,283 10,423 324,314 1,255,227 14,660
28 bilanution Fromback & Disp 28 minution fromback & Disp 27 minution from the comment of the	28 Stimulation Flowback & Disp 28 Mud / Wastewater Disposal 30 Ntg Supervision / Engineering 31 Drig & Completion Overhead 35 Labor 54 Proppant 59 Insurance 97 Contingency 99 Plugging & Abandonment TO TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 86 Tanks 69 Production Vessels 70 How Lines 71 Rod string 72 Artiticial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps 75 Downhole Pumps 75 Downhole Pumps 76 Downhole Pumps 77 Downhole Pumps 76 Downhole Pumps 77 Downhole Pumps 77 Downhole Pumps 77 Downhole Pumps 78 Downhole Pumps	OTAL INTANGIBLES >	121,196 10,423 153,358 	121,606 61,151 133,420 	21,667	2/1,606 254,254 276,283 10,423 324,514 1,255,227 14,660
23 Mode/ Westwater Disposed 10,15 5 53,15 5 5 5 5 5 5 5 5 5	23 Mud / Wastewater Disposal 32 Drig & Completion Overhead 35 Labor 35 Labor 36 Proppant 37 Indianament 37 Indianament 38 Inswarce 39 Pougging & Abandonment To TANGIBLE COST 50 Surface Casing 62 Drilling Liner 63 Production Casing 64 Production Casing 65 Production Liner 65 Tubling 66 Weithead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 How Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps 75 Downhole Pumps 75 Downhole Pumps 76 Downhole Pumps 77 Downhole Pumps 77 Downhole Pumps 76 Downhole Pumps 77 Downhole Pumps 78 Downhole Pumps	OTAL INTANGIBLES >	121,196 10,423 153,358 	61,151 133,420 69,489 1,255,227	21,667	254,254 276,283 10,423 324,514 1,255,227 14,660
13.196	30 Hig Supervision / Engineering 31 Drig & Completion Overhead 35 Labor 34 Proppani 95 Insurance 97 Contingency 99 Plugging & Abandonment TO TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Drilling 63 Production Casing 64 Production Liner 65 Tubing 65 Weithead 67 Packers, Liner Hangers 88 Tanks 69 Production Vessels 70 How Lines 71 Rod string 72 Artiticial Liti Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps 75 Downhole Pumps 75 Downhole Pumps 75 Poduction Costs	OTAL INTANGIBLES >	121,196 10,423 153,358 	69,489 1,255,227	101,667	2/6,283 10,423 324,514 1,255,22/ 14,660
131.07 1	33 Lbrig & Completion Overhead 35 Labor 54 Proppant 95 Insurance 97 Contingency 99 Plugging & Abandonment TO TANGIBLE COST 60 Surface Casting 61 Intermediate Casting 62 Drillting Liner 63 Production Lasing 64 Drillting Liner 65 Tubling 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 How Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps 75 Downhole Pumps 75 Downhole Pumps	OTAL INTANGIBLES >	10,423 153,358 14,660 3,516,419	69,489 1,255,227	101,667	10,423 324,514 1,255,227 14,660
15.15 17.50 17.5	35 Labor 58 Proppant 95 Insurance 97 Contingency 99 Plugging & Abandonment 95 Plugging & Abandonment TO TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 68 Production Liner 65 Tubling 65 Production Liner 65 Tubling 65 Prackers, Liner Hangers 68 Tanks 69 Prackers, Liner Hangers 67 Packers, Liner Hangers 71 How Lines 71 Rod string 72 Artiticial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps		153,358	1,255,227	 :	324,514 1,255,227 14,660
1.25,227	S4 Proppant §5 Insurance 97 Contingency 95 Plugging & Abandonment TI TANGIBLE COST 80 Surface Casing 61 Intermediate Casing 64 Production Casing 64 Production Liner 63 Production Liner 65 Tubing 65 Wellhead 67 Packers, Liner Hangers 86 Tanks 69 Production Vessels 71 How Lines 71 Rod string 72 Artiticial Liti Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps 75 Downhole Pumps		3,516,419	1,255,227	 :	14,660
97 Contingency 99 Pitagging & Abandonnent 10TAL INTANGBLES> 10TAL INTANGBLES> 10TAL INTANGBLES> 10TAL INTANGBLESS 10TAL INTANGBLE COSTS 10TAL INTANGBLE COSTS 10TAL INTONGBLE	97 Contingency 99 Plugging & Abandonment TO TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Production Liner 65 Tubing 69 Weilinead 79 Packers, Liner Hangers 80 Tanks 80 Fanks 80 Fanks 80 Fanks 17 How Lines 71 Rod string 72 Artiticial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps 75 Downhole Pumps		3,516,419	24,421		
99 Pluggling & Abandonnens	TANGIBLE COST SU SURIACE CASING 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubling 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 70 How Lines 71 Hod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps			24,421	3,833	28,254
TOTAL INTANGBLES \$3.56.489	TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 61 Intermediate Casing 63 Production Casing 64 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 88 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps					
TANCIBLE COSTS	TANGIBLE COST 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Froduction Casing 64 Production Liner 65 Tubling 65 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 How Lines 72 Artitlefal Lift Equipment 73 Artitlefal Lift Equipment 73 Compressor 74 installation Costs 75 Surface Pumps 75 Downhole Pumps				•	
NOSITIES COSTS C	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubling 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 99 Production Vessels 70 How Lines 71 Rod string 72 Artiticial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps	5	DRILLING	5,367,000	772,167	9,655,585
NOSITIES COSTS C	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubling 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 70 How Lines 71 Hod String 72 Artiticial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps	5		COMPLETION	PRODUCTION	TOTAL
12256	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubling 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 99 Production Vessels 70 How Lines 71 Rod string 72 Artiticial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps	5				
Statementation Statementary St	61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artiticial Liti Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps				C0313	
## Defining Liner ## Signord Casting ## Signore ## Production Liner ## Signore ## Signor	62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 How Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhose Pumps	•				
68 Production Casing 68 9 9 9 68 7 9 9 9 9 9 9 9 9 9	63 Production Casing 64 Production Liner 65 Tubing 65 Weithead 67 Packers, Liner Hangers 88 Tanks 69 Production Vessels 70 How Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps		344,264			
Mile Production Libre	64 Production Liner 65 Tubling 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 How Lines 72 Artitlefall Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps		687 1539			687.039
65 Teibling 65 Weilhead 65 Keyn 65 Weilhead 65 Keyn 65 Packers, Liner Hangers 14,732	65 Tubing 65 Texters, Liner Hangers 65 Packers, Liner Hangers 65 Tanks 65 Tanks 70 How Lines 71 Rod string 72 Artiticial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps		007,037			
SKEUNBAME	66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 How Lines 71 Rod string 72 Artitical Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhose Pumps 75 Downhose Pumps				140.000	T40.000
14,732	67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 How Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 Downhole Pumps		64.820			
99 Facilitation Vessels	68 Tanks 69 Production Vessels 70 How Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhote Pumps					
126,657 126,6567	70 How Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps					45,833
7. Rod string	71 Rod string 72 Artiticial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps				126,667	126,667
17. Artiklal Litt Equipment	72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhote Pumps				66,667	66,667
13 Compressor	73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhote Pumps			-		
74 Installation Cosis	74 Installation Costs 75 Surface Pumps 76 Downhole Pumps			-		
75 Surface Pumps 75 Downshote Pumps 77 Measurement & Meter Installation 77 Measurement & Meter Installation 78 Case Conditioning / Dehy dration 79 Case Condition 70 Case Condit	75 Surtace Pumps 76 Downhote Pumps				5,833	5,833
75 Downhote Pumps	76 Downhole Pumps					-
77 Measurement & Meter Installation					61,667	61,667
78 Case ConceitIoning Debydration						
79 Interconnecting Facility PipIng			<u> </u>		116,667	110,007
BU Cathering / Bulk Lines					200 0000	
81 Valves, Dumps, Controllers		5		- _	20,000	20,000
## ## ## ## ## ## ## ## ## ## ## ## ##					108.333	1000333
## SPEARED BY Permian Resources Operating, LLC: Production Engineer: PS Completions Engineer: ML Production Engineer: MC MH VP - Caperating SQ VP - Operations SQ SQ SQ SQ SQ SQ SQ S						
## Electrical / Grounding ## SCADA ## S						
## 1						
1,233,109						
TOTAL TANGIBLES 1,233,109 0 589,167 2,222,276 TOTAL COSTS 4,749,528 5,347,000 1,761,334 11,877,862 EPARED BY Perrulan Resources Operating, LLC: Drilling Engineer: PS						
TOTAL COSTS > 4,749,528 5,367,000 1,761,334 11,877,862 EPARED BY Perrulan Resources Operating, LLC: Drilling Engineer: PS Completions Engineer: ML Production Engineer: DC milan Resources Operating, LLC APPROVAL: Co-CEO	•	TOTAL TANGIBLES >	1,233,109		989,167	2,222,276
Drilling Engineer: PS Completions Engineer: ML Production Engineer: MC WH VP - Co-CEO VP - Operations CRM VP - Land & Legal PG WH VP - Geosciences BG VP - Geosciences SO Working Interest (%): Tax ID: Signed by: Date: Title: Approvat: Yes No (mark one)			_		1 761 334	11 877 862
Drilling Engineer: PS Campletions Engineer: ML Production Engineer: DC mian Resources Operating, LLC APPROVAL: Co-CEO		101AL C03137	4,17,520	3,507,500	2,702,0351	11,017,002
Campletions Engineer: ML Production Engineer: DC mian Resources Operating, LLC APPROVAL: Co-CEO WH Co-CEO JW VP - Operations CRM VP - Land & Legal BC N OPERATING PARTNER APPROVAL: Company Name: Working Interest (%): Tax ID: Signed by: Date: Title: Approval: Yes No (mark one)	PARED BY Permian Resourc	es Operating, LLC:				
Completions Engineer: ML Production Engineer: DC mian Resources Operating, LLC APPROVAL: Co-CEO WH Co-CEO JW VP - Operations CRM VP - Land & Legal BC NO OPERATING PARTNER APPROVAL: Company Name: Working Interest (%): Tax ID: Signed by: Date: Title: Approvat: Yes No (mark one)	- w - ·					
Production Engineer: DC mian Resources Operating, LLC APPROVAL: Co-CEO VP - Operations VP - Operations VP - Operations ORM VP - Land & Legal PROVAL: NO OPERATING PARTNER APPROVAL: Company Name: Working Interest (%): Tax ID: Signed by: Date: Title: Approval: Yes No (mark one)						
Co-CEO Co-CEO VP - Operations CRM VP - Land & Legal RG VP - Geosciences SO IN OPERATING PARTNER APPROVAL: Company Name: Working Interest (%): Tax ID: Signed by: Date: Title: Approval: Yes No (mark one)		ML				
Co-CEO	Production Engineer:	DC				
Co-CEO		CARROLLA				
VP - Land & Legal WH VP - Geosciences SO	uuan kesources Operating, LI	A APPROVAL:				
VP - Land & Legal	Co-CEO		Co-C	CEO	VP - Oper	
NOPERATING PARTNER APPROVAL: Company Name: Working Interest (%):		WH		JW	•	
NOPERATING PARTNER APPROVAL: Company Name: Working Interest (%):	VP - Land & Legal		VP - Geoscier	nces		
Company Name: Working Interest (%): Tax ID: Signed by: Date: Title: Approval: Yes No (mark one)		BG		so		
Company Name: Working Interest (%): Tax ID: Signed by: Date: Title: Approval: Yes No (mark one)				· -		
Company Name: Working Interest (%): Tax ID: Signed by: Date: Title: Approval: Yes No (mark one)						
Company Name: Working Interest (%): Tax ID: Signed by: Date: Title: Approval: Yes No (mark one)	N OPERATING PARTNER A	PPROVAL:				
Signed by: Date: Title: Approval: Yes No (mark one)				Working Internet Co.		Tay ID:
Title: Approval: Yes No (mark one)	Company Name:			Working Interest (%):	T	Tax ID:
	Signed by:			Date:	<u></u>	
	Title			Annoval-	Yes	☐ No (mark one)

Permian Resources Operating, LLC

300 N. Marlenfeld St., Ste. 1000 Midland, TX 79701 Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE					
DATE:	2.17.2023	AFE NO.:	1		
WELL NAME:	Joker 5-8 Federal Com 203H	FIELD:	Tonto; Wolfcamp		
LOCATION:	Section 5, T20S-R34E	MD/TVD:	21,191' / 10,906'		
	Las Carreta Maria Maria	LATERAL LENCTU	10,000		

Lea County, New Mexico LATERAL LENGTH: COUNTY/STATE: Permian WI: DRILLING DAYS: 19.6 WCXY COMPLETION DAYS: GEOLOGIC TARGET: Drill a horizontal WCXY well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost REMARKS: DRILLING COSTS COMPLETION COSTS PRODUCTION COSTS TOTAL INTANGIBLE COSTS 1 Land/ Legal/ Regulatory 2 Location, Surveys & Damages 4 Freight/ Transportation 54.16 96,566 18,067 43,778 215,417 288,079 47,628 408 FA7 116,406 444,744 5 Rental - Surface Equipment 124,327 105,000 5 Kental - Surface Equipment 6 Kental - Downhole Equipment 7 Kental - Living Quarters 10 Directional Drilling, Surveys 11 Drilling 12 Drill Bits 205.424 59,805 AK IIK I 54,480 102.562 47U 544 753,820 100,176 100,176 12 Drill Bits
13 Fuel & Power
14 Cementing & Float Equip
15 Completion Unit, Swab, CTU
16 Periorating, Wireline, Silckline
17 High Pressure Pump Truck
18 Completion Unit, Swab, CTU
20 Mud Circulation System
21 Mud Locatine 188.935 725.061 913,996 243,296 243,296 15,000 393,136 123,274 146,484 15,000 393,136 123,274 105,209 20 Med Circulation System
21 Med Logging
22 Logging / Formation Evaluation
23 Med & Chemicals
24 Water
25 Stimulation
26 Stimulation Flowback & Disp 17,529 7,270 361,835 8,339 15,609 438,185 661,625 814,033 10.000 810.020 43,459 300,000 150,000 121,606 271,606 28 Mud / Wastewater Disposal 30 Rig Supervision / Engineering 32 Drig & Completion Overhead 39 Labor 61,151 193,104 254,254 133,420 21,667 276.283 10,423 153,358 10,423 324,514 69,489 1,255,227 101,667 54 Proppant 95 Insurance 1.255.227 14.660 14,660 97 Contingency 99 Plugging & Abandonment 24,421 3,833 TOTAL INTANGIBLES > 3,516,419 5,367,000 772,167 9,655,585 DRILLING COSTS COMPLETION COSTS PRODUCTION COSTS TOTAL COSTS TANGIBLE COSTS
60 Surface Casing
61 Intermediate Casing 344,284 344,284 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 687,039 687,039 140,000 140,000 64,820 66 Wellhead 40,000 104,820 67 Packers, Liner Hangers 14,732 20.000 34,732 67 Packers, Liner Hangers
68 Tanks
69 Production Vessels
70 Flow Lines
71 Rod string
72 Artificial Lift Equipment 126,667 66,667 66,667 90,000 5,833 90,000 73 Compressor 74 Installation Costs 75 Surface Pumps 5,833 61.667 61.667 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 116,667 116,667 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 20,000 20,000 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack 108,333 43,333 16,667 108,333 16,667 84 Electrical / Grounding 50,000 50,000 85 Communications / SCADA 86 Instrumentation / Safety 2,222,276 TOTAL TANGIBLES > 1,233,109 989.167

PREPARED BY Permian Resourc	es Operating, LL	Ci.			
Drilling Engineer:	PS				
Completions Engineer:	ML				
Production Engineer:	DC				
			 	 	 _

4,749,528

5,367,000

1,761,334

11,877,862

NON OPERATING PARTNER	APPROVAL:		
Company Name:		Working Interest (%):	Tax ID:
Signed by:		Date:	
Title: _		Approval: Yes	No (mark one)
The courts can thin AST are entirested early and more not be executed	ed as critisan as our executive term or the total cost of the respect. Taking installation	and the first of the second of	

TOTAL COSTS >

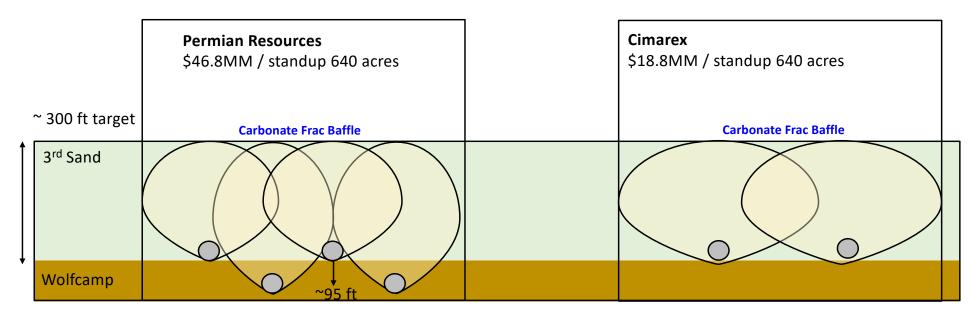
Permian Resources Operating, LLC 300 N. Marienfeld St., Ste. 1000 Midland, TX 79701 Phone (432) 695-4222 • Fax (432) 695-4063

STIMATE O	F COSTS AND A	UTHORIZATION	FÖR EXPENDITURE

	D 417 0000				1
DATE:	2.17.2023	10417		AFE NO.: _	
WELL NAME:	Joker 5-8 Federal Com 2	104H		FIELD:	Tonto; Wolfcamp
LOCATION:	Section 5, T20S-R34E			MD/TVD:_	21,181' / 10,896'
COUNTY/STATE:	Lea County, New Mexic	:0		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	WCXY			COMPLETION DAYS:	19
	Drill a horizontal WCX	well and complete wi	ith 44 stages. AFE includ	les drilling, completions,	flowback and Initial
REMARKS:	AL install cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	OSTS	COSTS	COSTS	COSTS	COSTS
T Land / Legal / Regulatory		5 59,066	•	37,500	\$ 96,566
2 Location, Surveys & Damas	es es	288,079	18,067	2,500	308,647
4 Freight / Transportation		47,628	43,778	25,000	116,406
5 Kental - Surface Equipment 6 Kental - Downhole Equipm		124,327	215,417	105,000	265,229
7 Kental - Living Quariers	esti	48,083	54,480		102,562
10 Directional Drilling, Surve	-ve	429,543			429,543
11 Drilling	70	753,820			753,820
12 Drill Bils		100,176			100,176
13 Fuel & l'ower		188,935	725,061		913,996
14 Cementing & Float Equip		243,296			243,296
15 Completion Unit, Swab, C				15,000	15,000
16 Perforating, Wireline, Silc		•	393,136		393,136
17 High Pressure Pump Truc			123,274	-	123,2/4
18 Completion Unit, Swab, C	נט		146,484		146,484
20 Mud Circulation System		105,209	····		105,209
21 Mud Logging		17,529	· · ·		17,529
22 Logging / Formation Evalu 23 Mud & Chemicals	auvil	361,835	8,339 438,185	10,000	15,609 810,020
24 Water		43,459	661,625	300,000	1,005,083
25 Stimulation			814,033	300,000	814,033
26 Stimulation Flowback & L	isp		121,606	150,000	2/1,606
28 Mud/Wastewater Dispose		193,104	61,151		254,254
30 Rig Supervision / Enginee		121,196	133,420	21,667	276,283
32 Drig & Completion Overh		10,423			10,423
35 Labor		153,358	69,489	101,667	324,514
54 Proppant			1,255,227		1,255,227
95 Insurance		14,660			14,660
97 Contingency			24,421	3,833	28,254
99 Plugging & Abandonmen					· ·
	TOTAL INTANGIBLES:	3,516,419	5,367,000	772,167	9,655,585
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE O	nere	COSTS	COSTS	COSTS	COSTS
60 Surface Casing	7313	122,234	· · · · · · · · · · · · · · · · · · ·		<u>5</u> 122,234
61 Intermediate Casing		344,284	_		344,284
62 Drilling Liner					
63 Production Casing		687,039			687,039
64 Production Liner					
65 Tubing				140,000	140,000
66 Wellhead		64,820		40,000	104,820
67 Packers, Liner Hangers		14,732		20,000	34,732
68 Tanks				45,833	45,833
69 Production Vessels				126,667	126,667
70 Flow Lines				66,667	66,667
71 Rod string				90,000	90,000
72 Artiticial Lift Equipment					5,833
73 Compressor 74 Installation Costs				5,833	3,033
75 Surtace Pumps				61,667	61,667
76 Downhole Pumps					
77 Measurement & Meter Ins	taliation			116,667	116,667
78 Gas Conditioning / Dehyd					
79 Interconnecting Facility Pi				20,000	20,000
80 Gathering / Bulk Lines					
81 Valves, Dumps, Controller		-		108,333	108,333
82 Tank / Facility Containme	ıt		•	43,333	43,333
83 Flare Stack				16,667	16,667
84 Electrical / Grounding 85 Communications / SCAD/			<u> </u>	50,000	50,000
	•			36,667	36,667
86 Instrumentation / Safety	TOTAL TAX-000-00	1,233,109		833	2,222,276
	TOTAL TANGIBLES			989,167	
	TOTAL COSTS:	> 4,749,528	5,367,000	1,761,334	11,877,862
EPARED BY Permian Reso	umas Onorotina TTO				
EFARED B1 Fermian Resc	urces Operating, LLC:				
Drilling Engineer	PS				
Completions Engineer					
Production Engineer					
Production Engineer	ii.				
mian Resources Operating	, LLC APPROVAL:				
		Co-C		VP - Oper	ntions
Co-CEC			Jw		CRM
Co-CEC	WH				
	WH	VP - Geoscier			
Co-CEC	WH	VP - Geoscier	nces		
Co-CEC	WH	VP - Geoscier			
Co-CEC	WH	VP - Geoscier			
Co-CEC	WH	VP - Geosciei		- - -	
Co-CEC VP - Land & Lega	WH BG	VP - Geoscier			
Co-CEC VP - Land & Lega NN OPERATING PARTNE	WH BG R APPROVAL:	VP - Geoscies	so		
Co-CEC	WH BG R APPROVAL:	VP - Geosciei		т.	ax ID:
Co-CEC VP - Land & Lega ON OPERATING PARTNE Company Name	WH BG R APPROVAL:	VP - Geoscies	SO Working Interest (%):	т,	ax ID:
Co-CEC VP - Land & Lega NN OPERATING PARTNE	WH BG R APPROVAL:	VP - Geoscie:	so	т	ıx ID:
Co-CEC VP - Land & Lega ON OPERATING PARTNE Company Name Signed by	WH BG R APPROVAL:	VP - Geoscie:	Working Interest (%):		
Co-CEC VP - Land & Lega ON OPERATING PARTNE Company Name	WH BG R APPROVAL:	VP - Geoscie:	SO Working Interest (%):		nx ID:No (mark one)

O

Diagram of Staggered Landing Wolfcamp + 3rd SS vs. 3rd SS Flat

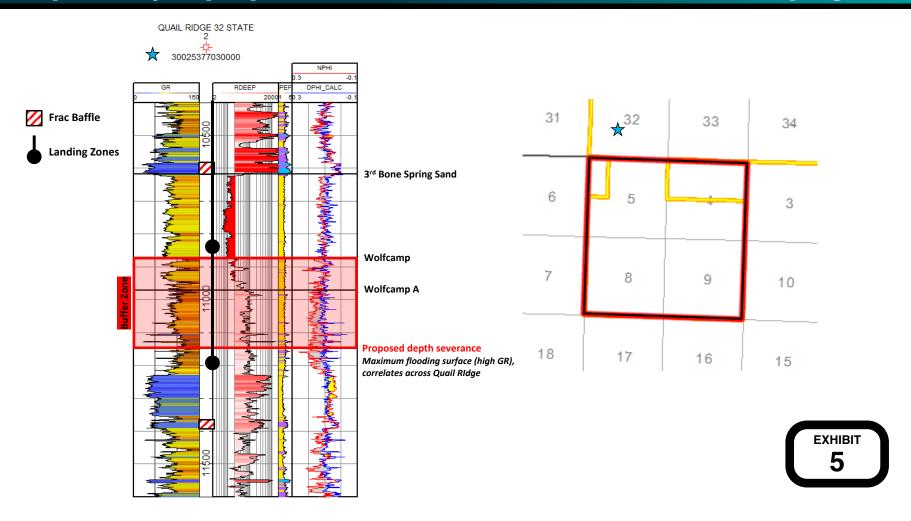


- Cimarex has experience developing as many as 8 landings within a DSU successfully in Lea county with 9th drilling now, 35 to 38 wells / section. The difference is the combination of geology (barriers, reservoir height, and flow units) don't support the proposed staggers at Mighty Pheasant Loosey Goosey as demonstrated by area developments like Black and Tan.
- 3rd and Wolfcamp landed this close together are equivalent to 8 WPS flat in the 3rd Sand, double the AOI proven density.
- A wealth of data from the DOE and industry funded Hydraulic Fracture Test Site 2 supports an upper Wolfcamp buffer zone in this specific location to protect proven 3rd Sand correlative rights and prevent capital waste.

EXHIBIT 4

O

Proposed Wolfcamp Depth Severance to Minimize Interaction with 3rd Bone Spring Sand



District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS

Action 240073

QUESTIONS

Operator:	OGRID:
CIMAREX ENERGY CO.	215099
6001 Deauville Blvd	Action Number:
Midland, TX 79706	240073
	Action Type:
	[HEAR] Prehearing Statement (PREHEARING)

QUESTIONS

Testimony					
Please assist us by provide the following information about your testimony.					
Number of witnesses	4				
Testimony time (in minutes)	48				