MEMORANDUM OF UNDERSTANDING

DEFINITIONS

Abandonment or abandoned means the permanent abandonment of a well based on the operator's filing with the COGCC.

Applicant means Samson Resources Corporation.

Best Management Practices means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices intended to prevent or reduce the pollution of waters of the State of Colorado as described in the regulations of the Colorado Department of Public Health and Environment, as amended from time to time.

BLM means the Bureau of Land Management.

COGCC means the Colorado Oil and Gas Conservation Commission of the State of Colorado.

Conventional gas well means a well producing from a non-coalbed methane formation found in the San Juan Basin, such as the Mesa Verde or Dakota Sandstone formations.

County means the Board of County Commissioners of La Plata County.

Easement means express or implied authorization by a property owner for the use of a designated portion of his property by another, for a specified purpose.

Fruitland Coal Well means a gas well drilled for the purpose of producing gas from the Fruitland coal seams underlying the lands described in the Infill Application.

Gas well means a well having a pressure and volume of natural gas; specifically, producing methane, often in combination with a variety of other substances such as butane, propane and carbon dioxide.

Green completion means a technique whereby gas is recovered for sale or use instead of being vented or flared during initial completion flow back operations.

Heavy equipment means individual truck/trailer combination vehicles with a gross vehicle weight exceeding 5 tons.

Infill Application means the application filed by Applicant with the COGCC in Cause No. 112, Docket No. 1203-AW-01 on or about January 5, 2012 requesting an increase of the of Fruitland Coal Wells in portions of La Plata County, Colorado.

Infill Application Area means the area within La Plata County described in the Infill Application.

Infill County Permit means any permit the county issues pursuant to LPLUC for minor oil and gas facilities and major oil and gas facilities related to the Infill Application.

Infill Wells means those wells contemplated to be drilled by virtue of the Infill Application.

LPLUC means the La Plata County Land Use Code, as amended.

Low bleed means pneumatic controllers installed on field equipment to replace high bleed devices that vent small amounts of methane continuously.

Major oil and gas facilities shall have the meaning set forth in Section 90-19 of LPLUC.

Minor oil and gas facilities shall have the meaning set forth in Section 90-19 of LPLUC.

Permanent operations means operations for an Infill Well after initial drilling, completion and interim reclamation and before abandonment.

Reasonable efforts means diligent and good faith efforts to accomplish a given objective.

Right-of-way means a tract or strip of land, separate and distinct from the underlying property, owned, occupied or intended to be occupied by an oil, gas and/or water pipeline.

Road Maintenance and Improvement Fees means the County road maintenance and improvement fees described in Article 3 below.

Well Pad means the flat graveled portion of the pad area in which permanent operations for the gas well take place.

RECITALS

A. La Plata County is a political subdivision of the State of Colorado authorized to act through its Board of Commissioners.

B. Applicant is a gas producing operator which has filed the Infill Application with the COGCC requesting an increase in the density of Fruitland Coal

Wells in parts of La Plata County, Colorado. The Infill Application requests authority for five (5) Fruitland Coal Wells within the Infill Application Area.

C. The parties to this Agreement have differing legal positions regarding the degree and extent of the County's authority to regulate certain aspects of oil and gas operations. The parties prefer, if possible, to avoid expending their resources in advancing their legal positions. Notwithstanding these differences and in their desire to avoid protracted formal hearings, the County and Applicant are willing to agree to the terms contained herein.

D. The provisions of Chapter 90 of LPLUC require Applicant to obtain a county permit for the construction, installation and operation of oil and gas facilities within the unincorporated areas of the county except with respect to those lands where the County's jurisdiction is preempted by federal or state law, or by Southern Ute Indian Tribal jurisdiction.

E. The County seeks to facilitate the development of oil and gas resources within the above-described areas of the county while mitigating potential impacts from such development.

F. The County has determined that potential impacts attendant to future gas development would be best mitigated for the county as a whole if future Fruitland Coal Wells are drilled on existing well pads where practical and as prescribed in LPLUC despite the fact that, in some instances, the use of existing well pads may further affect certain property owners and neighboring properties.

G. C.R.S. § 43-2-147 allows the County to, and describes the manner in which, the County shall regulate vehicular access to and from any public highway under its jurisdiction and from or to property adjoining a public highway in order to protect the public health, safety and welfare, to maintain smooth traffic flow, to maintain highway right-of-way drainage and to protect the functional level of public highways.

H. The County, as a matter of right, may intervene in the adjudicatory proceedings before the COGCC related to the Infill Application to raise environmental or public health, safety and welfare concerns. In exchange for the agreements contained herein, the County will not protest Applicant's Infill Application, nor, if it intervenes in the adjudicatory proceedings related to the Infill Application, will it advocate any position inconsistent with any term contained in this Agreement.

I. Applicant and the County wish to have certain issues amicably resolved prior to the COGCC's adjudicatory proceedings on the Infill Application and they agree that certain provisions of this Agreement should be included (subject to COGCC approval) in the requested Infill order.

[REST OF PAGE LEFT INTENTIONALLY BLANK]

AGREEMENT

In consideration of the mutual obligations and benefits set forth in this Agreement and for other good and valuable consideration, the receipt of which is acknowledged, Applicant and the County agree as follows:

ARTICLE I APPLICATION

This Agreement shall apply to lands presently within the unincorporated portions of the Infill Application Area within the County with the exception of those lands where the County's jurisdiction is preempted by federal or state law, or by Southern Ute Indian tribal jurisdiction.

ARTICLE II

DENSITY AND USE OF EXISTING WELL PADS AND FACILITIES

2.1 *Density*. Applicant agrees that, except as provided in Article 2.2 herein or as may be otherwise permitted in the COGCC order approving Applicant's Infill Application, the density of Well Pads within the Infill Application Area shall not exceed four (4) within any single 640-acre governmental section of real property. Notwithstanding the foregoing, nothing contained in this Article II shall be construed so as to require the closure or abandonment of any existing gas well.

2.2 *Well Location; Exceptions.* The County believes that the potential impacts attendant to future gas development would be best mitigated for the County as a whole if future Fruitland Coal Wells are drilled on existing well pads ("Pad Drilling"). Special exceptions to Article 2.1 may be requested by Applicant in its applications for Infill County Permits. The County will grant special exceptions when the County finds that one or more of the following factors apply in a manner such that use of an existing Well Pad is rendered impractical:

- a. topographic characteristics of the site;
- b. natural resource constraints (*e.g.*, wetlands);
- c. the location of utilities or similar services;
- d. demonstratively insurmountable technical issues related to the development or management of the mineral resource;
- e. other site conditions beyond the control of Applicant; or
- f. demonstrable safety concerns.

2.3 Use of Existing Infrastructure. Applicant agrees, except as provided in Article 2.2, to use existing infrastructure, including but not limited to the use of existing roads, pipeline routes and Well Pads within the existing drilling windows in the Infill Application Area. Nothing contained in this Article 2.3 shall preclude Applicant from installing additional or substitute facilities within the existing roads, pipeline routes and Well Pads if reasonably required to produce and operate the Infill Wells. The County

recognizes that some minor reconfiguration of the existing infrastructure or additional easements may be necessary due to the placement of multiple wells on existing Well Pads. At the request of the County, Applicant shall furnish information demonstrating Applicant's requested need for new facilities (roads, pipeline easements, well pads, *etc.*) and new facilities may be required due to:

1. The lack of existing infrastructure in a COGCC permitted Fruitland drilling window or unit.

2. Engineering, geologic, safety, surface feature, economic, and/or without limitation any other constraints that make use of existing infrastructure reasonably impractical.

3. Facility ownership constraints that make the sharing or use of existing facilities reasonably impractical.

2.4 Setbacks and Pad Drilling. Section 90-122(b) of LPLUC establishes certain setback requirements. The county recognizes that in some instances, existing minor oil and gas facilities which initially met the setback requirements of this section do not currently meet the requirements due to (i) the encroachment of other development into the setback area, (ii) the facility is a nonconforming uses, as defined in this chapter, due to a failure to meet current setback requirements; or (iii) because a waiver previously was obtained. In those instances, where the setback requirements of this paragraph cannot be met, the use of the existing well pad site may be considered for siting of a new well, provided that the placement of the new well's wellhead is not closer to the nearest lot or property line or building structure for human occupancy than the existing well's wellhead.

2.5 *Expansion of Existing Well Pads.* In those instances where an existing Well Pad is used for an Infill Well, Applicant agrees to use reasonable efforts to minimize the expansion of the area of the existing Well Pad. The reasonableness of the expansion under the circumstances shall be demonstrated by Applicant to the County with its Infill County Permit application. Applicant agrees to exercise reasonable efforts to expand existing well pads away from nearby existing impacted residential structures.

ARTICLE III

PRIVATE ROADS AND ROAD MAINTENANCE AND IMPROVEMENT FEES

3.1 Road Maintenance and Improvement Fees. County and Applicant have determined that specific land use activities by Applicant within the Infill Application Area may create impacts on County roads and, therefore, mitigation in the form of negotiated road maintenance and improvement fees is proper and necessary. The parties recognize that these fees are not always a reliable or sufficient source of funds and that the County's ability to actually perform such work may be limited or hampered by reasons beyond its control. However, the County agrees to exercise good faith in its efforts to carry out the intent of this Agreement and to perform such work to the extent

that monies are available and appropriated. The County shall control the sequencing and timing of such work and Applicant hereby waives its rights, if any, to insist upon completion of the work or to dictate the manner, sequencing and timing of the same. The County recognizes and acknowledges that the monies collected hereunder must be collected and spent in a manner consistent with the accounting practices set forth in C.R.S. § 29-1-801 *et seq.* and that such monies may only be spent on facilities that are directly and reasonably related to the mitigation of impacts related to the activities described in the Infill Application.

3.2. Road Maintenance and Improvement Fees Calculation and Payment. Based upon certain agreed upon assumptions, Applicant and the County have agreed to estimated Road Maintenance and Improvement Fees for minor oil and gas facilities with respect to the Infill Application of \$8,900. All major facilities shall pay fee(s) based upon a traffic study associated with the Class II permit for such major facility and such fee(s) shall be based upon the methodologies used by the parties to derive the fees set forth herein.

Applicant shall pay the County the Road Maintenance and Improvement Fee due and owing for the prescribed activity prior to the County's final approval of the Infill County Permit. If a permit is not issued for the proposed infill well, then the fee will be returned to Applicant.

3.3 The County seeks to efficiently and Submission of Information. effectively schedule maintenance and improvement projects on its county roads. The use of such roads by heavy equipment related to construction or production activities in the Infill Application Area could have an effect on such projects. The County seeks and Applicant agrees to provide the County, on a quarterly basis, a forecasted activity plan setting forth the expected location and duration of minor oil and gas facilities and major oil and gas facilities operations within the county for the upcoming quarter as well as the county roads to be accessed and general proposed travel or haul routes. The disclosure of such plans and routes is for informational purposes only and shall not be construed as creating any obligation on the part of Applicant, including, without limitation, to conduct such operations, to limit the location and duration of such operations or to follow such routes. The first submission of such information shall occur within thirty (30) days after the COGCC order approving the Infill Application. The County agrees to reciprocate and provide notice to Applicant of its intended projects and its expected schedule for same.

3.4 *Private Access*. Applicant agrees that in those instances where it accesses Infill Wells in the Infill Application Area through a private road or roads, it will use reasonable efforts to negotiate a fair and reasonable road maintenance or road improvement agreement with the private entity or entities that maintain the road for the purpose of paying or making in-kind contributions for its pro rata share of the cost of maintaining or improving the affected road(s). If Applicant fails to reach an agreement, documentation of its actions shall be provided to the County, and the existence, or lack thereof, of such executed agreement shall be noted in the Infill County Permit application.

ARTICLE IV AIR QUALITY

4.1 *Greenhouse Gas Reduction.* Applicant agrees to utilize reasonable efforts to minimize methane emissions by using "green completion" techniques, and the installation of "low bleed" pneumatic instrumentation, when feasible.

4.2 *Emission Control Equipment.* Samson will comply with existing EPA rules and any current and future regulations validly adopted by an authority with appropriate jurisdiction, including regulations that may be adopted by the Southern Ute Indian Tribe.

ARTICLE V INCLUSION INTO COGCC ORDER

Applicant and the County agree to jointly request that certain conditions, as set forth in attached Exhibit A, be incorporated into the COGCC order approving the Infill Application.

ARTICLE VI SITE SPECIFIC DEVELOPMENT PLAN AND FUTURE REGULATIONS

This Agreement shall not grant or create any common law or statutory vested development rights or exempt Applicant from any applicable County development review regulations or processes. The County reserves the right in the future to enact and apply prospectively oil and gas regulations that are general in nature and are applicable to all similarly situated oil and gas activities subject to land use regulation by the County, even though such regulations may be more or less stringent than the standards applicable to the Infill Wells by virtue of this Agreement.

ARTICLE VII PRESERVATION OF RIGHTS

The parties acknowledge, understand and agree that this Agreement shall not operate as a bar, constitute a waiver of any rights of the parties, or in any respect affect the ability of any party to this Agreement to assert its claims concerning the validity of the County's land use jurisdiction. Nothing in this Agreement shall be construed as an admission regarding the existence of proper jurisdictional authority or waiver by either party of any legal right or obligation, nor shall anything be construed as a bar to either party to seek any legal remedy available to it.

ARTICLE VIII

Once each calendar year, Samson will provide summary information to the County regarding the status of Samson's activities within the Infill Application Area, with respect to:

Section 2.2 - well location exceptions,

Section 3.2 – road impact fees

Section 4.2 - green completion techniques.

This information will be presented in table format with the following fields:

- County permit number
- Well name
- Date well completed
- Exception location status (ie is the well an exception location)
- Reason for exception location (if applicable)
- Road impact fee tier and amount paid
- Date electrification implemented
- Target electrification date (if not already electrified)
- Green completion status (i.e. were green completion practices used?)

In addition to the summary information set forth above, Applicant will provide to the County an overview of its proposed drilling plans in the Infill Application Area for the following calendar year, with the recognition by the County that such plans would be tentative and subject to change and with the County's agreement that such plans would be kept confidential.

ARTICLE IX GENERAL PROVISIONS

The following general provisions shall govern the relationship between the parties with respect to Infill Fruitland Coal Wells within the Infill Application Area.

9.1 *Effective Date and Term.* This Agreement shall be effective upon entry of the COGCC's order approving the Infill Application.

9.2 *Entire Agreement*. Except as otherwise expressly set forth herein, this Agreement embodies the complete agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes and preempts any prior understandings, agreements or representations by or between the parties, written or oral, which may have related to the subject matter hereof in any way.

9.3 *Successors and Assigns*. Except as otherwise provided herein, Applicant shall have the absolute right to transfer or sell any or part of its interest in the Infill Wells;

provided, however, that in the event of transfer, Applicant's transferees, sublessees, successors and assigns shall be bound to comply with all terms hereof.

9.4 *Counterparts.* This Agreement may be executed in one or more counterparts, each of which shall be deemed an original but all of which when taken together shall constitute a single agreement.

9.5 *Amendment*. All covenants, representations and warranties herein and all other obligations, responsibilities and terms hereof shall continue to be fully binding and enforceable on the parties until expressly superseded by written agreement of the parties. No amendment to this Agreement shall be effective unless in writing, signed by all parties who are then subject to this Agreement.

9.6 *Waiver*. No failure on the part of any party hereto to exercise and no delay in exercising any right hereunder shall operate as a waiver of such right. The remedies provided herein are cumulative and not exclusive of any remedies provided by law. No waiver of, or failure to exercise any right hereunder shall operate to prevent future enforcement of such right.

9.7. *Notices*. Notices hereunder may be given by certified mail, return receipt requested, or by facsimile or electronic mail transmission. Notices shall be effective on receipt, provided, however, that confirmation of receipt shall be required in all instances. Notice to the respective parties shall be given to:

To the County at:	With copies to:
Courtney Krueger Planning Department La Plata County 1060 E. 2 nd Avenue Durango, Colorado 81301	County Attorney's Office 1099 Main Ave., Suite 311 Durango, Colorado 81301
To Applicant at:	With copies to:
Samson Resources Company ATTN: Land Department 370 17 th Street, Sute 3000 Denver, Colorado 80202	Beatty & Wozniak, P.C. 216 16 th Street, Suite 1100 Denver, CO 80202

or to any other addresses as any party hereto may, from time to time, designate in writing and deliver in a like manner.

9.8 *Headings*. The descriptive headings of the sections of this Agreement are inserted for convenience only and shall not control or affect the meaning or construction of any of the provisions hereof.

9.9 *Further Acts.* Each of the parties shall promptly and expeditiously execute and deliver any and all documents and perform any and all acts as reasonably necessary, from time to time, to carry out the matters contemplated by this Agreement.

9.10 No Partnership; Third Party Beneficiaries. It is not intended by this Agreement to, and nothing contained in this agreement shall, create any partnership, joint venture or other arrangement between Applicant and the County. No term or provision of this Agreement is intended to or shall be for the benefit of any person, firm, organization or corporation not a party hereto and no other person, firm, organization or corporation shall have any right or cause of action hereunder.

9.11 Severability. The provisions of this Agreement are deemed material and nonseverable. If an action is brought that results in any provision of this Agreement being determined or declared by a Court to be illegal, invalid or unenforceable under present or future laws effective during the term of this Agreement, the parties shall negotiate in good faith for an equivalent or substitute provision or other appropriate adjustment to this Agreement. If the parties cannot reach agreement, or if so desired by the parties, then the issues in dispute shall be submitted to a mediator acceptable to both parties for nonbinding mediation. Unless otherwise agreed to by the parties, such mediation shall occur within sixty (60) days of a party's receipt of a notice to mediate from the other party.

SAMSON RESOURCES CORPORATION

By: Stor h. States

Name: Steve R. Stacy Attorney-in-fact

BOARD OF COUNTY COMMISSIONERS LA PLATA COUNTY, COLORADO

Robert Lieb, Jr., Chair

(SEA Clerk to the

EXHIBIT A

PROPOSED CONDITIONS OF APPROVAL

Applicant Samson Resources Corporation ("Applicant") and Intervenor La Plata County, Colorado ("La Plata County") respectfully request that an Order issued by the Commission in Cause No. 112, Docket No. 1203-AW-01 be made subject to and conditional upon the following:

1. Compliance with all terms, conditions and provisions of prior Commission Orders in Cause No. 112.

2. Compliance with the terms and provisions of all of the Commission's health, safety, welfare and environmental rules and regulations now or hereafter in effect.

3. Those certain provisions as set forth in Exhibit A of the Memorandum of Understanding between Applicant and La Plata County as follows:

• Surface Density

The density of Well Pads within the Infill Application Area shall not exceed four (4) within any single 640-acre governmental section of real property. Notwithstanding the foregoing, nothing contained in this provision shall be construed so as to require the closure or abandonment of any existing gas well.

• Well Location; Exceptions

The Commission may grant a special exception allowing for a greater density of Fruitland Coal Well Pads (i.e., more than 4 per 640-acre section), at the request of Applicant and after consultation with the Local Governmental Designee, based upon a finding by the Commission that the La Plata County Land Use Code requires a greater density or one or more of the following factors apply in a manner such that use of an existing Well Pad is rendered impractical:

- a. topographic characteristics of the site;
- b. natural resource constraints (*e.g.*, wetlands);
- c. the location of utilities or similar services;
- d. demonstratively insurmountable technical issues related to the development or management of the mineral resource;
- e. other site conditions beyond the control of Applicant; or
- f. demonstrable safety concerns.

4. Compliance with all applicable regulations of the BLM, BIA and the Southern Ute Indian Tribe when conducting operations on lands subject to such agency's/government's jurisdiction.