U.S. Department of the Interior
Bureau of Land Management
Little Snake Field Office
455 Emerson Street
Craig, CO 81625-1129

ENVIRONMENTAL ASSESSMENT

EA-NUMBER: CO-100-2006-040 EA

PERMIT/LEASE NUMBER: COC69198 (State of Colorado 21-16)
COC69200 (Chapman State 34-16)

PROJECT NAME: Samson State of Colorado #21-16 and Chapman State #34-16 Pipelines

LEGAL DESCRIPTION: T.11N.,R.97W., section 16, 6th PM, Moffat County, Colorado:
State of Colorado #21-16 pipeline, SE¼NE¼NW¼
Chapman State #34-16 pipeline, S½NE¼SE¼, E½SW¼SE¼, NW¼SE¼SE¼
(See Exhibit A)

APPLICANT: Samson Resources Company

PLAN CONFORMANCE REVIEW: The proposed action is subject to the following plan:

Name of Plans: Little Snake Resource Management Plan and Record of Decision

Date(s) Approved: April 26, 1989

Remarks: The proposed pipelines are located within Management Unit 2, Northern Central, (Little Snake Resource Management Plan). The objectives for this management unit are to provide for the development of the oil & gas resource. Realty actions, such as rights-of-way, leases, and permits can occur, consistent with the management objectives of the unit.

Results: The proposed action has been reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3). The proposed action is in conformance with the objectives for this management unit.

NEED FOR PROPOSED ACTION: The purpose of the proposed pipelines is to transport natural gas from the State of Colorado #21-16 well and the Chapman State #34-16 well and deliver energy resources to the American public.

PUBLIC SCOPING PROCESS: The NEPA log is posted on the Little Snake Field Office web site and published in the Craig Daily Press before the grant is issued to the applicant.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES: The proposed action is to issue right-of-way grants to Samson Resources Company for three inch buried natural gas transportation pipelines for the State of Colorado #21-16 well and the Chapman State #34-16 well. The short pipeline laterals would go from the wells to tie-in points on an existing Questar pipeline. The proposed pipelines are located approximately 10 miles southeast of Powder Wash Camp, Moffat County, Colorado. The approximate date work would start is May 2006 and the estimated duration of construction is one to two weeks. Moffat County Roads 4, 75 and 127 would be used to access the pipeline corridor.

The proposed wells are located on BLM surface with State minerals. The well pads were granted as a Right-of-Way (EA CO-100-2005-52), approved 07/20/2005.

Samson plans to install three inch buried pipelines. The wall thickness of the pipelines will be 0.216 inches. The designed pressure will be 1,480 psi. Actual pressure will be 150-600 psi. The grade will be "FBE" uncoated pipeline w/ beveled connection.

The length of the pipeline for the State of Colorado #21-16 well will be 350 feet and 50 feet wide, consisting of 0.40 acre during construction. Upon completion of interim reclamation, the permanent width would be 30 feet, consisting of 0.24 acre.

The length of the pipeline for the Chapman State #34-16 well will be 2,666 feet long and 50 feet wide, consisting of 3.06 acres during construction. Upon completion of interim reclamation, the permanent width would be 30 feet, consisting of 1.84 acres.

A grader will be used to construct or clear the pipeline ROW. Angle dozers will be used if terrain dictates. The ROW will be cleared 50 feet wide and soil will be stockpiled. Bladed materials will be placed back onto the cleared route once construction is completed. The pipeline will be welded and dragged with a dozer into place. Alternatively, certain portions of the pipeline may be constructed by laying pipe in the existing road borrow ditch, picking the pipe up with the side boom cats, then welded and placed along side of the road. All construction will be with as little surface disturbance as possible.

Pipeline construction will not block nor change the natural course of any drainage. Pipeline trenches will be compacted during backfilling. Pipeline trenches will be maintained in order to correct settlement and erosion. Road crossings will be trenched to a depth of five feet prior to placing the pipeline in the trench. Following the placement of the pipeline into the trench all open road cuts will be backfilled and compacted in order to maintain the integrity of the existing road. The pipeline will be hydrostatically tested prior to filling the trench.

All above ground permanent structures including production equipment (valving and piping, etc.) will be painted a non-contrasting color to blend harmoniously with the surrounding landscape. The color specified is Munsell Color Reference Number, Shale Green (5y 4/2).

Pipeline markers will be installed where appropriate. Waterbars are to be constructed at least one foot deep, on the contour with approximately two feet of drop per 100 feet of waterbar to ensure drainage, and extended into established vegetation. All waterbars are to be constructed

with the berm on the downhill side to prevent the soft material from silting into the trench. The initial waterbar shall be constructed at the top of the backslope.

A temporary staging area is anticipated at the well location, within the well pad area, and all equipment will be removed upon completion of pipeline construction.

Revegetation will be accomplished in the fall, unless requested otherwise. Samson will prepare seedbed by disking or ripping following the natural contour, then drill seed on contour lines at a depth no greater than ½ inch. The areas that cannot be drilled will be broadcast at double the seeding rate and harrowed into the soil. Certified seed is recommended.

During reclamation of the site, Samson will push the fill material into cuts and up over the back slope, leaving no depressions that will trap water or form ponds. Topsoil will be distributed evenly over the location, and seeded accordingly. Perennial vegetation must be established. Additional work shall be required in case of seeding failure.

NO ACTION ALTERNATIVE: The pipeline will not be built and the gas will not be sent to market.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: There are no special designation air sheds or non-attainment areas nearby that would be affected by the proposed action.

Environmental Consequences: Short term, local impacts to air quality from dust would result during and after pipeline construction. The proposed action will not adversely affect the regional air quality.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 02/24/06

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer – 4/12/06

CULTURAL RESOURCES

Affected Environment: Cultural resources, in this region of Colorado, range from late Paleo-Indian to Historic. For a general understanding of the cultural resources in this area of Colorado, see *An Overview of Prehistoric Cultural Resources, Little Snake Resource Area, Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, *An Isolated Empire, A History of Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resource Series, Number 2 and *Colorado Prehistory: A Context for the Northern Colorado River Basin*, Colorado Council of Professional Archaeologists.

Environmental Consequences: The proposed project(s), COC69198 and COC69200, have undergone a Class III cultural resource survey:

Larson, Don R.
2005 Samson Resources Company, Chapman State 34-16 pipeline Class III Cultural Resource Inventory. 05-WAS-629; BLM 12.40.05. Western Archaeological Services, Rock Springs, Wyoming.

Letter
2005 Documentation for a Class III exclusion for the proposed Samson Resources Company State of Colorado 21-16 pipeline (05-WAS-622); BLM 12.27.05. Western Archaeological Services, Rock Springs, Wyoming.

The survey identified (no) eligible to the National Register of Historic Places prehistoric cultural resources. The proposed project may proceed as described in this EA with the following mitigative measures in place.

Mitigative Measures: Project specific mitigation

The following standard stipulations apply for this project:

1. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO will inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and

- Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

2. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

Name of specialist and date: Henry S. Keesling 2006

ENVIRONMENTAL JUSTICE

Affected Environment: This project will not impact the minority or low-income populations.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Phillis A. Bowers, 02/02/2006

FLOOD PLAINS

Affected Environment: Active floodplains and flood prone zones are avoided.

Environmental Consequences: No threat to human safety, life, welfare, or property will result from the proposed action.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 02/24/06

INVASIVE, NONNATIVE SPECIES

Affected Environment: Halogeton *(Halogeton glomeratus)* and cheatgrass *(Bromus tectorum)* are known to occur along roadsides, well pads, pipelines and other disturbed areas. Given an opportunity, both these species are capable of out competing native vegetation

communities, and becoming the dominant cover type without management. Several biennial thistles are known to occur in this area given wet enough conditions. The potential for other noxious weeds to occur exists given favorable climatic and growing conditions.

Environmental Consequences: The surface disturbing activities and associated traffic involved with pipeline construction will create a favorable environment, and provide a mode of transport, for invasive species and other noxious weeds to become established. Invasive species can be spread through a variety of means including vehicular travel, wind, water, wildlife and livestock movement. Required mitigation attached as Conditions of Approval to minimize disturbance, and the utilization of interim reclamation techniques would facilitate control of invasive species and reduce the potential of long term infestation of annual and noxious weed species. All principles of Integrated Pest Management should be employed to control noxious weeds on public lands.

Mitigative Measures: None

Name of specialist and date: Curtis Bryan 2/21/06

MIGRATORY BIRDS

Affected Environment: The pipeline corridors are located in a sagebrush/grass community and provide foraging and nesting habitat for a variety of migratory bird species. The project area provides habitat for two sagebrush obligate species listed on USFWS's Bird of Conservation Concern List, the sage sparrow and the Brewer's sparrow.

Environmental Consequences: If construction activities occur during the nesting season, there could be negative impacts to migratory bird species through nest destruction or increased stress leading to nest abandonment. Where the pipelines follow existing roads, the potential to impact nesting bird species would be low as many birds position nests away from roads. If construction activities are conducted outside of the nesting season, there is very little chance of take of any migratory bird species.

Mitigative Measures: None

Name of Specialist and Date: Desa Ausmus 2/10/06

NATIVE AMERICAN RELIGIOUS CONCERNS

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council, and the Colorado Commission of Indian Affairs on January 21, 1999. The letter listed the projects that the BLM would notify them on and projects that would not require notification. No comments were received (Letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Henry S. Keesling 2006

PRIME & UNIQUE FARMLANDS

Affected Environment: Not Present

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 02/24/06

T&E SPECIES - SENSITIVE PLANTS

Affected Environment: There is an elemental occurrence of the BLM sensitive species Nelson's milkvetch (*Astragalus nelsonianus*) approximately one mile northeasterly of the Proposed Action, however there are no BLM sensitive plant species that are present in the immediate vicinity of the Proposed Action. Nelson's milkvetch is a rhizomatous perennial herb with 6-20 large white flowers. It flowers from late May through June and produces seeds in rigid pods which persist on the plant over winter. It primarily inhabits poorly developed seleniferous soils on gullies, hillsides, and flats.

Environmental Consequences, Proposed Action: Surveys for Nelson's milkvetch in Wyoming in 2002 revealed increasing populations within rights-of-way and two-track roads. It appears that this plant is able to take advantage of disturbance to expand beyond typical habitats. While the Proposed Action will not directly impact any known populations of this plant, the disturbance associated with pipeline installation may actually increase the potential of this plant to persist and expand beyond the known population.

Environmental Consequences, No Action: This alternative would have no impact on Nelson's milkvetch, as no disturbances associated with pipeline construction would occur.

Mitigative Measures: None

Name of specialist and date: Hunter Seim 2/6/06

T&E SPECIES – ANIMALS

Affected Environment: There are no threatened or endangered animal species in or near the proposed project area. The proposed pipeline corridors fall within mapped greater sage grouse winter range. The project site does not provide nesting or brood rearing habitat for greater sage grouse.

Environmental Consequences: Impacts to grouse species from oil and gas development are discussed in the Colorado Oil and Gas EIS (1991). Impacts include, but are not limited to, displacement into less suitable habitat and loss of habitat. Other impacts, such as habitat fragmentation and the spread of exotic plants can also degrade sage grouse habitat (Connelly et al. 2004). While both pipelines have been mapped within greater sage grouse

winter habitat, most of the pipeline corridors follow existing disturbances and do not have vegetative characteristics which would support sage grouse during the winter months. The project area does provide some habitat for grouse during non-critical times of the year or when moving to and from winter or nesting habitat. Some minor impacts to sage grouse would still be expected from this project, mostly from indirect impacts to habitat or displacement during construction activities. However, construction of the proposed pipelines should not significantly impact sage grouse utilizing the project area.

Mitigative Measures: None

Name of Specialist and Date: Desa Ausmus 2/10/06

T&E SPECIES – PLANTS

Affected Environment: There are no federally listed threatened or endangered plant species within or in the vicinity of the Proposed Action.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 2/6/06

WASTES, HAZARDOUS OR SOLID

Affected Environment: If the release does occur, the environment affected would be dependent on the nature and volume of material released. If there are no releases, there will be no environmental impact.

Environmental Consequences: Consequences will be dependent on the volume and nature of the material released. In most every situation involving hazardous materials, there are ways to remediate the area that has been contaminated. Short-term consequences will occur, but they can be remedied, and long-term impacts will be minimal.

Mitigative Measures: None

Name of specialist and date: D. Johnson 2/14/06

GROUNDWATER HYDROLOGY/QUALITY

Affected Environment: The surface geology is the Laney Member of the Tertiary Green River Formation. This formation consist of soft, light to medium brown, tan, yellowish tan, and light yellow thin bedded fissile oil shale, claystone, sandstone, marlstone, siltstone, limestone, and air fall tuff. Limestone beds locally contain agatized gastropods, pelecypods, and algal heads. Tuff beds have potassium argon ages of 47-45 million

years. The thickness ranges form 50 to 250 meters. This formation most likely does not contain near surface fresh water aquifers.

Environmental Consequences: The gas pipeline system will be built with best construction practices to prevent leaks that could contaminate any potential fresh water aquifers.

Mitigative Measures: none

Name of specialist and date: Fred Conrath 02/14/06

WATER QUALITY – SURFACE

Affected Environment: The proposed pipelines for the Samson wells would be constructed near an unnamed ephemeral drainage that drains into Ace in the Hole Draw, another ephemeral drainage that drains into Powder Wash. All stream segments near the pipeline location are presently supporting classified beneficial uses. No impaired stream segments occur in the vicinity of the proposed action.

Environmental Consequences: Runoff water from the pipeline corridors would drain towards Powder Wash, which is an ephemeral tributary to the Little Snake River. Construction of the pipeline trench should follow the recommendations provided in the Surface Operating Standards for Oil and Gas Development, 3rd Edition. Increased sedimentation to Powder Wash during spring runoff or from high intensity rainstorms is the most likely environmental consequence from the proposed action. Although some sediment may be transported off site and eventually reach perennial waters, the mitigation provided in the Plan of Development and the stipulations for the Right-of-Way will reduce the potential impacts caused by surface runoff.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 02/24/06

WETLANDS/RIPARIAN ZONES

Affected Environment: No wetlands or riparian zones exist in the project area.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Desa Ausmus 2/10/06

WILDERNESS, WSA, AND WILD & SCENIC RIVERS

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer – 4/12/06

NON-CRITICAL ELEMENTS

PALEONTOLOGY

Affected Environment: The geologic formation at the surface is the Tertiary (Eocene) Bridger Formation (Tb). Tb is a soft gray, green, tan, red, brown, white, yellow, and turquoise-blue fluvial and lacustrine shale, mudstone, claystone, siltstone, and minor sandstone and limestone. Locally it is tuffaceous and contains silicified snail fossils and algal heads. This formation has been classified as a Class I formation for the potential for occurrence of scientifically significant fossils.

Environmental Consequences: Scientifically significant fossils are found frequently within this formation (Armstrong & Wolney, 1989). The potential for discovery of significant fossils within this formation is considered to be high. If any such fossils are located here, construction activities could damage the fossils and the information that could have been gained from them would be lost. The significance of this impact would depend upon the significance of the fossil. The proposed action could also constitute a beneficial impact to paleontological resources by increasing the chances for discovery of scientifically significant fossils.

The potential impact to paleontological resources is usually effectively mitigated by ceasing operations and notifying the Field Office Manager immediately upon discovery of a fossil during construction activities. An assessment of the significance is made and a plan to retrieve the fossil or the information from the fossil is developed.

_____ The terrain is such that outcrops are exposed (eg. Badlands), therefore, a surface survey for paleontological resources will be required prior to surface disturbance.

_____ The majority of the terrain is covered with developed soils and vegetation. Therefore, a surface survey for paleontological resources will not be required.

__X__ The proposed action constitutes limited surface disturbance so as to make discovery of fossils by surface survey unlikely.

Mitigative Measures: This impact can be effectively mitigated by ceasing operations and notifying the Field Office Manager immediately upon discovery of a fossil during construction activities. An assessment of the significance is made and a plan to retrieve the fossil or the information from the fossil is developed.

The majority of the terrain is covered with developed recent soils and vegetation. Therefore, a surface survey for paleontological resources will not be required.

Discovery Stipulation, Realty

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

Name of specialist and date: Robert Ernst 3 February 2006

SOILS

Affected Environment: The Colorado State Well #21-16 is located within the Vermillion-Langspring complex soil-mapping unit. Typically, this soil complex is found on hillslopes or plateaus. Slopes within this unit average 3 to 25 percent. The Chapman State Well #34-16 is located within the Haterton-piezon complex. This soil complex is found on hillslopes or plateaus. Slopes within this unit average 3 to 12 percent.

Environmental Consequences: Some instability of the soil surface will occur in the short term following construction disturbance and reclamation, but as plants are established this soil erosion would be reduced to near natural rates. Mitigation provided in the proponents Plan of Development for the proposed action, as well as, the surface mitigation contained in the stipulations will reduce the potential to have excessive sediments and salts in runoff water from the site.

Mitigative Measures: None.

Name of specialist and date: Barb Blackstun 02/24/06

VEGETATION

Affected Environment: The proposed action is located in a sagebrush-grass community. Dominant plant species for this site include Wyoming big sagebrush *(Artemesia tridentata wyomingensis),* western wheatgrass *(Agropyron smithii),* needle and thread *(Stipa comata)*, Indian ricegrass *(Oryzopsis hymenoides),* Galleta *(Hilaria jamesii),* prairie junegrass *(Koeleria cristata),* and sandberg bluegrass *(Poa secunda).*

Environmental Consequences: The Proposed Action would remove approximately 2.24 total acres of vegetation for pipeline installation. The total disturbance caused by pipeline

construction is minimal and would not jeopardize the greater herbaceous community provided that appropriate weed management practices are employed. Appropriate weed management practices and the utilization of interim reclamation techniques are critical to the integrity of the surrounding plant community.

Mitigative Measures: None

Name of specialist and date: Curtis Bryan 2/21/06

AQUATIC WILDLIFE

Affected Environment: No aquatic wildlife or habitat for aquatic wildlife exists in the project area.

Environmental Consequences: None

Mitigative Measures: None

Name of Specialist and Date: Desa Ausmus 2/10/06

TERRESTRIAL WILDLIFE

Affected Environment: The proposed project area provides year round habitat for pronghorn antelope, mule deer and elk in all but the most severe winters. The Chapman State 34-16 pipeline crosses a historic white-tailed prairie dog town. The project area also provides habitat for a variety of small mammal, bird and reptile species.

Environmental Consequences: Impacts to wildlife species from oil and gas development are discussed in the Colorado Oil and Gas EIS (1991). Impacts include, but are not limited to, displacement into less suitable habitat, increased stress and loss of habitat. These impacts are more significant during critical seasons, such as winter or reproduction. Although the project area does not provide critical habitat for wildlife species, some impacts to wildlife would still be expected from this project. Impacts would mostly occur from habitat modification or displacement during construction activities. Construction of the proposed pipelines should not significantly impact terrestrial wildlife species utilizing the project area.

Most small mammals using the project area would be capable of avoiding construction equipment and should not be directly harmed by these activities. Some burrowing animals may be killed by construction equipment. This should be considered a short-term negative impact that is not likely to harm populations of any species.

The 34-16 well pipelines cross historic white-tailed prairie dogs towns. These towns are currently inactive and appear to have been inactive for several years. Construction activities

associated with the proposed pipelines would not impact white-tailed prairie dogs.

Mitigative Measures: None

Name of Specialist and Date: Desa Ausmus 2/10/06

VISUAL RESOURCES

Affected Environment: Visual Resource Management (VRM) classifications for the proposed project area include: Class IV (major modification of landscape change allowed)

Environmental Consequences: The proposed action will not impact existing VRM classifications.

Mitigative Measures: None

Name of specialist and date: Jim McBrayer - 4/12/06

RANGE MANAGEMENT/RANGE IMPROVEMENTS:

Affected Environment: The proposed action would take place in the Nipple Rim Allotment #04213. This allotment is permitted to Smith Rancho (#04213) and Morgan Creek Land and Livestock. The Nipple Rim Allotment is run in common with Smith Rancho and Morgan Creek Land and Livestock. Smith Rancho and Morgan Creek Land and Livestock are each permitted for 1989 AUM's of sheep use from October 20 to May 20.

Environmental Consequences: The proposed action would remove approximately 2.24 acres of total vegetation, and consequently AUM's as a direct impact. The increase in vehicle traffic and human activities in this area, as a result of pipeline construction and maintenance may displace livestock from the immediate area. As a result of this displacement livestock pressure may be higher in other areas of this allotment. If utilization monitoring and use pattern mapping indicate that livestock are exhibiting an unacceptable level of utilization in other parts of this allotment due to displacement, permitted AUM's on this allotment may need to be reduced. This allotment is used as a winter grazing allotment and thus distribution is not expected to have a significant impact as a result of snow. It is not anticipated that the proposed action will have a significant impact on livestock management.

Mitigation Measures: None

Name of specialist and date: Curtis Bryan, RMS 2/21/06

OTHER NON-CRITICAL ELEMENTS: For the following elements, those brought forward for analysis will be formatted as shown above.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Fluid Minerals		FC 02/14/06	
Forest Management	PB2/21/06		
Hydrology/Ground		FC 02/14/06	See section above
Hydrology/Surface		BB02/24/06	
Paleontology			RE 2/3/06
Range Management			CB 02/21/06
Realty Authorizations		PAB 02/02/2006	
Recreation/Travel Mgmt		RS 02/06/06	
Socio-Economics		PAB 02/02/2006	
Solid Minerals	RE 2/3/06		
Visual Resources			JMcB 02/16/06
Wild Horse & Burro Mgmt	VD 02/26/06		

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts may result from the development of the Samson State pipelines when added to non-project impacts that result from past, present, and reasonably foreseeable future actions. The potential exists for future oil and gas development throughout the Powder Wash Field. Currently numerous producing wells exist within a one-mile radius of the proposed pipeline. Other past or existing actions near the project area that have influence on the landscape are wildfire, recreation, hunting, grazing, and ranching activities.

Surface disturbance associated with oil and gas activity would increase the potential for erosion and sedimentation. Only a small reduction in available forage would be anticipated. Some wildlife species may be temporarily displaced by construction at the pipeline route, but should return once construction is completed. Contrasts in line, form, color, and texture from development would impact the visual qualities on the landscape.

Over the last 20 years there has been a slow but steady increase in oil and gas production facilities within the Powder Wash Field. Cultural resource surveys in the area have identified several prehistoric cultural resources. These resources were at one time further away from the industry activity. Now they are in close proximity to these facilities. As infield development occurs with more pipelines, compressors, access roads, and pads being constructed, a real potential for impacts to known and yet to be recorded cultural resources is present.

Cumulative impacts to the plant communities within the project and adjacent areas include an incremental reduction of continuity in the plant communities in terms of acreages that remain

undisturbed. Loss of continuity results in smaller and smaller areas of undisturbed native vegetation and the potential for loss of integrity within the larger plant community. Fragmented plant communities can lose resilience to natural and man-made disturbance due to isolation of areas from seed sources necessary for proper age class distribution of plants, and subsequently, a greater opportunity for stressors such as drought to have a more severe impact on the plant community as a whole. The increased disturbance also makes native plant communities more susceptible to invasion by annual weeds as vectors for weeds increase. Even with weed control measures applied, the potential for weeds to move further into undisturbed remnant areas increases as these remnants become smaller and more isolated from larger undisturbed areas.

Cumulative impacts to the livestock grazing operations in the area are also increased through the Proposed Action. The growth in wells, roads, and human activity has reduced the availability of forage in this area far beyond direct impacts caused by construction. Halogeton which has increased among the new roads, pipelines, and well pads is toxic to livestock. The resulting impact to grazing activities permitted in the area is a loss of available Animal Unit Months (AUMs), i.e. a loss of the amount of livestock that the allotment can reasonably carry. However, as precipitation patterns improve, there will be a likely significant increase in the amount of livestock that can be permitted on the allotment. Utilization and production monitoring of unaffected areas remaining in the allotment would be necessary to determine a proper stocking rate after accounting for the loss of available forage from gas development (both direct and indirect) if improving precipitation patterns result in better forage conditions throughout the allotment.

The cumulative effects of projected oil and gas development are minimized through Best Management Practices identified in the Surface Use Plan of the APD and ROW Plan of Development and the BLM required mitigation in the Conditions of Approval for the APD and ROW stipulations. Proper construction and drilling practices must comply with federal and state environmental regulations. All oil and gas related development in the area would be completed in accordance with Onshore Order No. 2. Reasonably foreseeable mineral development would occur under the guidelines of the Little Snake Resource Management Plan and the Colorado Oil and Gas Leasing and Development EIS.

STANDARDS

PLANT AND ANIMAL COMMUNITY (plant) STANDARD:
The plant communities impacted by the Proposed Action are currently meeting this standard. Plant diversity, vigor, abundance, and reproductive capability are currently at levels that ensure resilience in the plant community to human activities. Weeds, particularly halogeton, must be addressed and all principles of invasive weeds control should be employed. Given this mitigation measure, the Proposed Action would meet this standard. The No Action Alternative would also meet this standard because the disturbances would not occur.

Name of specialist and date: Curtis Bryan, RMS 2/21/06

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The project area provides habitat for a variety of wildlife species. The proposed action is not expected to significantly impact wildlife species or their habitat. The proposed action would not preclude this standard from being met.

Name of specialist and date: Desa Ausmus 2/10/06

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant) STANDARD: There are no federally listed threatened or endangered plant species within or in the vicinity of the Proposed Action. For federally listed species, this standard does not apply. There is an elemental occurrence of Nelson's milkvetch, a BLM sensitive species, approximately one mile northeasterly of the Proposed Action. The occurrence will not be impacted by the Proposed Action, but the type of disturbance associated with the construction of these pipelines favors the potential expansion of this plant based on surveys conducted in Wyoming in 2002. The Proposed Action would meet this standard.

Name of specialist and date: Hunter Seim 2/6/06

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: The project area provides habitat for greater sage grouse, a BLM sensitive species. The project is not expected to significantly impact greater sage grouse or their habitat. The proposed action would not preclude this standard from being met.

Name of specialist and date: Desa Ausmus 2/10/06

RIPARIAN SYSTEMS STANDARD: The riparian standard for healthy public lands will not be affected by the proposed action.

Name of specialist and date: Desa Ausmus 2/10/06

WATER QUALITY STANDARD: The proposed action would meet the public land health standard for water quality. Reclamation of the pipeline corridors would be completed to minimize sheet and rill erosion from the site. Best Management Practices listed in the Plan of Development and stipulations would help to reduce accelerated erosion of the site. No stream segments near this project are listed as impaired.

Name of specialist and date: Barb Blackstun 02/24/06

UPLAND SOILS STANDARD: The proposed action will not meet the upland soil standard for land health in the short term. The pipeline corridors will not exhibit the characteristics of a healthy soil after construction. Upland soil health will return when revegetation of the corridors has been successfully achieved. Several Best Management Practices have been designed into the project or are attached as stipulations to the Right-of-Way that will reduce impacts to and conserve soil materials.

Name of specialist and date: Barb Blackstun 02/24/06

PERSONS/AGENCIES CONSULTED: Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office.

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The environmental assessment, analyzing the environmental effects of the proposed action, has been reviewed. With the implementation of the attached mitigation measures there is a finding of no significant impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.

2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.

3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas or designated Areas of Critical Environmental Concern.

4. There are no highly controversial effects on the environment.

5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.

6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State or local natural resource related plans, policies or programs.

7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.

8. Based on previous and ongoing cultural surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.

9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.

10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

DECISION AND RATIONALE: It is my decision to issue two three inch buried pipelines to Samson Resources Company. I have determined that the construction of the pipelines is in conformance with the approved land use plan. The grants are for the construction, operation maintenance, and termination of two 3 inch buried natural gas pipelines located in T.11.,R.97W., section 16, State of Colorado #21-16 pipeline, SE¼NE¼NW¼, Chapman State #34-16 pipeline, S½NE¼SE¼, E½SW¼SE¼, NW¼SE¼SE¼, 6th PM, Moffat County, Colorado. The ROW grants will be for 25 years with the right to renew. The ROW's are subject to rental pursuant to 43 CFR 2885. The projects will be monitored as stated in the Compliance Plan outlined below.

It is the policy of the Bureau of Land Management to grant ROW's to occupy and use public land where such is consistent with resource values; the Bureau's planning system, and local government concerns. To this effect, no conflicts were found; the action does not result in any undue or unnecessary environmental degradation. The action is consistent with the Little Snake Resource Management Plan. The proposed use, as planned and mitigated, is a suitable use of the land, which will not conflict with the present or known future use of the area. The action is consistent with Section 28 of the Mineral Leasing Act of 1920, as amended (30 U.S.C. 185) and the regulations authorizing use of federal land under 43 CFR 2800.

MITIGATION MEASURES: See Exhibit B, Stipulations

COMPLIANCE PLAN(S): The pipeline will be monitored during the term of the right-of-way for compliance with the grant and stipulations. The right-of-way will be on a five-year compliance schedule after completion and reclamation of the project.

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

SIGNATURE OF AUTHORIZED OFFICIAL:

DATE SIGNED:

ATTACHMENTS:

Exhibit A, Maps
Exhibit B, Stipulations

Exhibit B
Stipulations
COC69198
COC69200

1. The holder shall construct, operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with the plan of development, which was approved and made part of the grant. Any relocation, additional construction, or use that is not in accord with the approved plan of development, shall not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations and construction, operation, approved plan of development, and termination shall be made available on the right-of-way area during construction, operation, and termination to the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.

2. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer (824-5089). Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

3. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO will inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and
- Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

4. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation

and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

5. The holder shall be responsible for weed control on disturbed areas with the limits of the right-of-way. The holder is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods (within limits imposed in the grant stipulations).

6. Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed b the Secretary of the Interior. Prior to the use of pesticides, the holder shall obtain from the authorized officer written approval of the plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the authorized officer. Emergency use of pesticides shall be approved in writing by the authorized officer prior to such use.

7. Prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange pretermintation conference. The conference will be held to review the termination provision of the grant.

DATE SIGNED: 04/07/06