Soil Scientist, GS-0470-12
(Technical Soil Services Specialist)

REASON FOR THIS POSITION

1. NEW ☐ | 2. IDENTICAL ADDITION TO THE ESTABLISHED PD NUMBER ☐ | 3. REPLACES PD NUMBER ☐

POSITION DESCRIPTION COVER SHEET

RECOMMENDED

4. TITLE	5. PAY PLAN	6. SERIES	7. GRADE
Soil Scientist	GS	0470	12

8. WORKING TITLE (Optional)	9. INCUMBENT (Optional)

OFFICIAL

10. TITLE: Soil Scientist

11. PP	12. SERIES	13. FUNC	14. GRADE	15. DATE (MONTH / DAY / YEAR)	16. I/A	17. CLASSIFIER
GS	0470	51	12		☐ Yes ☐ No	Deborah M. Kaiden

18. ORGANIZATIONAL STRUCTURE (Agency/Bureau)

1st Natural Resources Conservation Service	5th
2nd KS State Conservationists Off	6th
3rd Soil Survey Staff	7th
4th	8th

SUPERVISOR'S CERTIFICATION

I certify that this is an accurate statement of the major duties and responsibilities of the position and its organizational relationship and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds and that false or misleading statements may constitute violations of such statute or their implementing regulations.

19. SUPERVISOR'S SIGNATURE	20. DATE	22. SECOND LEVEL SUPERVISOR'S SIGNATURE	23. DATE

21. SUPERVISOR'S NAME AND TITLE	24. SECOND LEVEL SUPERVISOR'S NAME AND TITLE

FACTOR EVALUATION SYSTEM

FACTOR	25. FLD / BMK	26. POINTS	FACTOR	25. FLD / BMK	26. POINTS
1. Knowledge Required	Level 1-7	1,250	6. Personal Contacts	Level 3/C	180
2. Supervisory Controls	Level 2-4	450	7. Purpose of Contacts		
3. Guidelines	Level 3-4	450	8. Physical Demands	Level 8-2	20
4. Complexity	Level 4-5	325	9. Work Environment	Level 9-2	20
5. Scope and Effect	Level 5-4	225	27. TOTAL POINTS ▶		27. 2,920
			28. GRADE ▶		28. GS-12

CLASSIFICATION CERTIFICATION

I certify that this position has been classified as required by Title 5, US Code, in conformance with standards published by the OPM or, if no published standard applies directly, consistently with the most applicable published standards.

29. SIGNATURE	30. DATE

31. NAME AND TITLE: Jane Medina, Human Resources Manager

32. REMARKS	33. OPM CERTIFICATION NUMBER
This position is determined to be EXEMPT from the provisions of FLSA based on the PROFESSIONAL Exemption criteria. Evaluation statement on file.	

MASTER RECORD/INDIVIDUAL POSITION DATA

THIS SIDE TO BE COMPLETED BY THE CLASSIFIER

A. KEY DATA

1. FUNCTION (1)	2. DEPT. CD./AGCY-BUR-CD. (4)	3. SON (4)	4. MR. NO. (6)	5. GRADE (2)	6. IP NO. (6)
◀ A/C/D/I/R	AG 16	5275	022282	12	

B. MASTER RECORD

1. PAY PLAN (2)	2. OCC. SER. (4)	3. OCC. FUNC. CD. (2)	4. OFF. TITLE CD. (5)	5. OFF. TITLE (38)
GS	0470	51	0001	Soil Scntst

6. HQ. FLD. CD. (1)	7. SUP. CD. (1)	8. CLASS. STD. CD. (1)	9. INTERDIS. CD. (1)	10. DT. CLASS (6)
◀ 1 = HQ, 2 = FLD	8 ◀ 1 = Sup. SGEG, 3 = Mgr. SGEG, 4 = Sup. CSRA, 5 = Mgmt. CSRA, 6 = Leader LGEG, 8 = All Others	X ◀ X = New Std. Applied, Blank = NA	N = No, Y = Interdis	MO | DAY | YEAR 08/15/07

11. EARLY RET. CD. (1)	12. INACT / ACT (1)	13. DT. ABOL. (6)	14. DT. INACT / REACT (6)	15. AGCY. USE (10)
◀ 1 = Primary, 2 = Secondary, 3 = Foreign Svc., Blank = NA	◀ I = Inactive, A = Active	MO | DAY | YEAR	MO | DAY | YEAR	

16. INTERDIS. SER. (40)									
(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)

17. INTERDIS. TITLE CD. (50)									
(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)

C. INDIVIDUAL POSITION

1. FLSA CD. (1)	2. FIN. DIS. REQ. (1)	3. POS. SCHED. (1)	4. POS. SENS. (1)	5. COMP. LEV. (4)
E ◀ E = Exempt, N = Nonexempt	0Y ◀ 0 = None, 1 = CD 219, 2 = CD 220, 3 = SF 278, 4 = AD 392, 5 = SF 849	◀ A = Sched A, B = Sched B, C = Sched C, 0 = Excepted but not A, B, C	1N ◀ 0 = Nonsensitive, 1 = Noncritical, 2 = Critical Sensitive	470C

6. WK. TITLE CD. (4)	7. WK. TITLE (38)

8. ORG. STR. CD. (16)								9. VAC. REV. CD. (1)
1st	2nd	3rd	4th	5th	6th	7th	8th	◀ 0 = Position Action No Vacancy, A = No Change; B = Lower Grade, C = Higher Grade; D = Different title and / or series, E = New Position / New FTE
			917821					

10. TARGET GD. (2)	11. LANG. REQ. (2)	12. PROJ. DTY. IND. (1)	13. DUTY STATION (9) State (2)	City (4)	County (3)	14. BUS. CD. (4)	15. DT. LST. AUDIT (6)	16. PAS. IND. (1)	17. DATE EST. (6)
		◀ Blank = N/A, Y = Yes	20	4900	169	7777	MO | DAY | YEAR	◀ Blank = N/A, 1 = PAS	MO | DAY | YEAR

18. GD. BASIS. IND. (1)	19. DT. REQ. REC. (6)	20. NTE. DT. (6)	21. POS. ST. BUD (1)
◀ 1 = Rev. when vacant, 2 = Impact of Person, 3 = Sup. / SGEG, 4 = Sup. / Program, 5 = RGEG, 6 = Policy Analysis G E G, 7 = Equipment Devel. Guide, 8 = Agency Use, 9 = Agency Use, ALPHAS = Agency Use	MO | DAY | YEAR	MO | DAY | YEAR	Y ◀ Y = Perm, N = Other

22. MAINT. REV. / CLASS. ACT. CD. (2) (1st Digit = Activity and 2nd Digit = Results)

◀

Normal Aot	Maintenance Review Aot	Results		
1 = Desk Audit	5 = Desk Audit	1 = No Action Req.	5 = Series Change	9 = Other
2 = Sup. Audit	6 = Sup. Audit	2 = Minor PD Change	6 = Pos. Upgrade	
3 = Paper Rev.	7 = Paper Rev.	3 = New PD Req.	7 = Pos. Downgrade	
4 = PME / Activity Rev.	8 = Panel Rev.	4 = Title Change	8 = New Pos.	

23. DT. EMP. ASGN. (6)	24. DT. ABOL. (6)	25. INACT / ACT (1)	26. DT. INACT / REACT (6)	27. ACCTG. STAT. (4)	28. INT. ASGN. SER. (4)	29. AGCY. USE (6)
MO | DAY | YEAR	MO | DAY | YEAR	◀ 1 = Inact., 2 = Act.	MO | DAY | YEAR	0020		

30. CLASSIFIER'S SIGNATURE	31. DATE

32. REMARKS

FORM AD-332 (Revised) (4/88)

INTRODUCTION

This position is located on the State Soil Survey Staff, headquartered in state office (SO) of the Natural Resources Conservation Service (NRCS) in Kansas. As soil scientist, the incumbent of this position assists in providing leadership in the development, management, and direction of a comprehensive and integrated technical soil services program for the state that supports external and internal customers.

DUTIES AND RESPONSIBILITIES

Coordinates the delivery of soils information and technical services for conservation programs such as the Environmental Quality Incentives Program (EQIP), Farm and Ranch Lands Protection Program (FRPP), Wildlife Habitat Incentives Program (WHIP), and Wetlands Reserve Program (WRP).

Assists in providing leadership, direction, and technical guidance integrating soils information into all NRCS programs in the state. Encourages NRCS personnel to educate others on the importance of soil surveys in conservation of the land.

Provides soil database support for Revised Universal Soil Loss Equation 2 (RUSLE2), Comprehensive Nutrient Management Planning (CNMP), Wind Erosion Prediction System (WEPS), Windows/Pesticide Screening Tool (WIN-PST), and Soil Health Initiative, etc., to assist in the implementation of NRCS conservation planning.

Provides technical assistance and training to field soil scientists and other disciplines to ensure that accurate and current soils data is integrated into statewide NRCS programs.

Provides technical expertise and quality assurance in all phases of the soils program. Ensures that soils information provided is responsive to the needs of internal and external users and complies with NRCS standards and policies.

Assists in providing and coordinating training for all disciplines in NRCS, state agencies, and other users of soils information in the state. Directs the dissemination of soils data to external and internal customers.

Serves as a member on interdisciplinary teams providing assistance in leadership and resource applications. Assists in the technology transfer of soils information development for the electronic Field Office Technical Guide (eFOTG). Supplies soils information for state level support of the Farm Bill.

Conducts computer analyses of soils data and related information for multiple-use resource planning, publications, and technical guides. Ensures that area offices (AOs), field offices (FOs), and Data Access Service Center (DASC) soils databases are current.

Assists in developing and implementing long-range plan for maintenance and updating soils databases to meet continuing user needs. Assists in determining priorities for the state and soils business plan. Assists in conducting program quality assurance and oversight reviews.

Responsible for integration of Soil Survey Geographic (SSURGO) data into FO operations for use in planning. Responsible for providing technical support for Soil Data Viewer and Wetland Toolkit.

Performs other duties as assigned.

Works within a team concept to develop and implement ways to improve the efficiency, effectiveness, and quality of the products and/or services provided to internal and external customers.

Performs duties in a manner supportive of a safe and healthy work environment, and exercises safety precautions when exposed to dangerous objects, chemicals, extreme temperatures, etc.

Performs duties in a manner which actively supports civil rights policies regarding personnel rules and regulations and delivery of NRCS programs and services without regard to race, color, national origin, religion, sex, age, marital status, or mental or physical handicap.

CONDITION OF EMPLOYMENT

Operates a motor vehicle incident to the above duties. Must possess and maintain a valid state motor vehicle operator's license for the type of vehicle(s) operated.

EVALUATION FACTORS

1. Knowledge Required by the Position, Level 1-7, 1250 points

Professional knowledge of the technical and scientific principles, concepts and practices of soil science including soil genesis, soil morphology, soil formation, soil classification, and soil taxonomy in order to conduct on-site investigations and soil mapping, identify and resolve various problems, and gather and integrate data on soil characteristics, geology, and geomorphology. Comprehensive knowledge of the related principles of physics, chemistry, biology, geology, climatology, physiology, economics, and computer science sufficient to integrate soils information into NRCS programs.

Comprehensive knowledge of NRCS policies, procedures, and regulatory requirements in order to provide technical assistance for integrating soils information into statewide conservation programs.

Comprehensive knowledge of current research findings and technological advances in the soils field in order to formulate guidelines for use and application of soil, water, air, plant, animal (SWAPA) information associated with NRCS programs; knowledge of ecosystem-based assistance principles and resource management systems planning in order to integrate agronomic concerns; and comprehensive knowledge of soil/vegetation management practices and effects related to identification, protection, and restoration of riparian/stream ecosystems including sedimentation of stream bottoms, vegetation deterioration, thermal effects, and stream hydrology.

Knowledge and skill in adapting soil investigative techniques and development of new soil management practices to fit specific areas; i.e., extremely difficult critical area stabilization sites, complex crop production systems that present a wide range of production options reflective of current economic considerations, water requirements, drainage requirements, irrigation practices, plant adaptation and location, cultural practices, and physical factors.

Knowledge of, and skill in, oral and written communication methods, techniques, and procedures sufficient to clearly present soils information to diverse groups represented by federal, state, and local units of government; provide training; and develop guidelines and prepare written technical materials on soil management practices, wetlands, and erosion on croplands, rangelands, and forestlands.

Ability to analyze and interpret published data in order to adapt soil and agrochemical-related models measuring techniques and procedures; and provide assistance in the evaluation of soil/vegetation management practices and projects for noxious weed, pesticide and nutrient management, and agricultural waste management.

2. Supervisory Controls, FLD 2-4, 450 points

The incumbent is under the supervision of the State Soil Scientist/MO Leader who establishes overall goals and resources available. The incumbent and supervisor confer on the development of general objectives, projects, and deadlines.

The incumbent is responsible for planning and executing assignments, selecting appropriate techniques and methodology, and determining the approach to be taken in identified program area. The incumbent interprets and applies program policy in terms of established objectives, and keeps the supervisor informed of progress, and potentially controversial problems, concerns, issues, or other matters having far-reaching implications.

Completed work is reviewed for general adequacy and effectiveness in meeting program or project objectives, producing expected results, and compatibility with agency regulations.

3. Guidelines, Level 3-4, 450 points

The incumbent typically refers to the plan of operations, NRCS regional policies and procedures, technical guides and handbooks, textbooks, professional journals, previous experiences, and/or technical worksheets. Available guidelines are often inadequate for resolving contested, difficult questions. The incumbent must use initiative and experienced judgment gained through work-related, problem-solving operations to modify accepted methods and practices and develop techniques appropriate for successfully addressing deficiencies encountered.

4. Complexity, Level 4-5, 325 points

The work involves a variety of activities, such as performing preliminary soil survey investigations, conducting soil surveys, classifying and mapping soils, identifying soil chemical, physical and biological composition, and maintaining the project soil survey database. The incumbent provides guidance to NRCS staff, cooperating agencies, and others in an effort to maintain uniformity in an effective application of agronomic and ecological principles.

The work is complicated by the insufficiency of applicable guidelines, the changing needs of soil survey users, new technology applications, and a constantly changing soil classification system. The state is characterized by a wide diversity of soils, climatic conditions, and underlying deposits. There are also extreme variations in factors governing soil formation. Marked soil differences may be found within relatively short distances.

The incumbent must incorporate soil properties, characteristics and conditions from field and laboratory studies, with state and ecological databases, as well as computer mapping and correlation technology in devising solutions to work assignments. Other factors include the availability of soil information. Sound judgment must be used in determining the significance of soils information for use in agency programs, applying and adapting established standards, and conducting survey work in areas where soils are diverse and occur in complex patterns.

5. Scope and Effect, Level 5-4, 225 points

The purpose is to provide technical leadership for soils-based efforts. The work and achievements of the incumbent affect the work of other experts and the direction of other programs as well as the effectiveness and acceptability of agency goals, programs, and activities. The fundamental nature of the specialization affects decisions in practically all disciplines. Effective efforts in ecology are essential for realizing the full value of resource inventories and for achieving effective programs of soil conservation.

The incumbent ensures a correct understanding of soils data available to users and ensures that accurate and current soils data is integrated into statewide programs. The results of the work directly influence the effectiveness and acceptability of agency goals,

programs, and/or activities and the success of private consultants and non-agricultural land users in their application of technically sound land uses.

6. Personal Contacts
7. Purpose of Contacts, Level 3C, 180 points

Personal contacts are with other NRCS personnel at the field, area, and SO levels and with local and area district supervisors and employees. Non-routine contacts are also made with private landowners; professional consultants; agricultural colleges; universities; experiment stations; plant scientists; researchers; plant breeders; agricultural commodity associations; news media; representatives from other federal, state, and local agencies; and units of government and universities.

Contacts are for the purpose of keeping abreast of technology development, providing technical guidance, assessing the need for and providing training, and assuring that high quality technical assistance is being provided.

The incumbent will be called upon to develop and provide training for these various groups in all phases of the soil program. In all cases the incumbent must be tactful and diplomatic to achieve a consensus among people who have differing opinions.

8. Physical Demands, Level 8-2, 20 points

The work is divided between office and field. Field work requires regular and recurring physical exertion, such as long periods of standing, walking over rough terrain, climbing, bending, crossing rivers and creeks, standing in water, excavating sampling sites, and carrying equipment and heavy samples over rough terrain. Office work is primarily sedentary and includes working at a computer terminal.

9. Work Environment, Level 9-2, 20 points

Much of the work is in an office environment; however, a significant portion of time is spent traveling to field locations. The work involves moderate risks or discomforts which require safety precautions (e.g., properly lifting a soil auger, working alone in remote areas, exposure to adverse weather conditions, and exposure to animals and insects). Protective gear and closing such as boots and gloves are normally required.

This position is determined to be exempt from the provisions of FLSA.